When Is “Delivering the Goods” Not Enough? How Economic Disparities in Latin American Neighborhoods Shape Citizen Trust in Local Government

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Abstract

This article develops and tests a theory to explain why perceptions of good government performance are a necessary, but insufficient condition for the poor to trust their local government. We theorize that, independent of partisan sympathies, the poor evaluate local government on the basis of both government performance and economic disparities that they observe in their neighborhood of residence. Accordingly, the poor are less likely to trust their local government when they live in a context of high economic inequality, independent of their perceptions of overall government performance. To test our theory, we rely on census, public opinion, and systematic observation data collected within resident-identified neighborhood borders in each of 71 neighborhoods sampled from six municipalities in El Salvador. Our findings are consistent with our hypotheses and indicate that economic inequality at the neighborhood level may produce a reservoir of distrust in local government among the poor. Our results further highlight the political relevance of neighborhoods for the formation of citizen attitudes toward local government in the Latin American context.

Key Words: Political Trust, Economic Inequality, Comparative Politics, Decentralization, Latin America

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1 The data used in this project was collected as part of a larger impact evaluation study of USAID’s programs in Central America carried out by the Latin American Public Opinion Project (LAPOP). We thank LAPOP for making the data available to us, and USAID for providing the funds to collect the data. The authors are also thankful to Mark Peffley (University of Kentucky) and anonymous reviewers for their valuable feedback on previous drafts of this article. An early version of this article was presented at the 2012 Midwest Political Science Association conference, where we received excellent comments by Sam Handlin and other panel participants.

Introduction

The third wave of democratization that swept through the developing world resulted in, among other political transformations, greater autonomy and a more important role for local governments in the provision and distribution of public goods and services. Scholars have since provided compelling empirical evidence that trust in local government is a vital component of the overall political system’s perceived legitimacy, bolstering compliance with government regulations and taxation, and thereby sustaining the rule of law and providing governments with crucial resources.

All in all, extant research suggests that trust in local government can help promote democratic stability, particularly in new democracies. Even Cleary and Stokes, who emphasize the merits of citizen skepticism towards democratically elected officials in Latin America, point to the importance of institutional trust for building stronger democracies when that trust results from public institutions’ capacity to hold elected officials accountable. Yet despite the importance of institutional trust and the crucial role that local governments play in sustaining economic development and democratic governance, theories about what factors foster or undermine citizen trust in local governments remain underdeveloped.

Prior research has demonstrated the importance of three factors in shaping citizen attitudes towards their government: 1) citizens’ evaluations of government performance in terms of the quality of policy outcomes or the goods and services provided; 2) the process of

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3 Bardhan and Mookherjee 2006; Campbell 2003; Faguet 2012.
6 Cleary and Stokes 2006; 2009.
governance, including the perceived fairness of state actions; and 3) the partisan or ideological congruence between citizens and the current administration. The theoretical framework we develop here moves this literature forward in two ways.

First, our theory posits that, independent of citizens’ partisan sympathies, their position of relative deprivation will ultimately determine whether concerns with performance or fairness exert a stronger influence on their level of trust in local government. More specifically, we argue that for poor people who live in highly unequal neighborhoods, concerns with fairness will outweigh their assessments of performance in shaping their trust in local government. Conversely, more affluent individuals will place more emphasis on government performance when evaluating trust in their local government, regardless of contextual economic inequality. Thus, we argue that these two dimensions of evaluation—performance and fairness—have varying effects on trust in local government depending on the relative economic standing of individuals within their social context.

Second, because the formal processes of governance often go unnoticed by the average citizen, we posit that people largely judge the local government’s fairness by taking into account the most salient and accessible indicator available: the inequality of their neighborhood. Drawing on Fairness Heuristic Theory (FHT), we argue that the economic inequality of one’s

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10 Huckfeldt’s (1986, 2) classic study of neighborhood dynamics in the United States conceptualized the “neighborhood” as a “shared geographic locale of a residential grouping.” We refine this conceptualization slightly for application to the Latin American context and define “neighborhoods” as the smallest geographic units within a local government jurisdiction that have been given a distinct proper name. In the Latin American context, neighborhoods are typically called “barrios,” “vecindarios,” or “colonias.” The Portuguese equivalents are “bairros.”
neighborhood is an important heuristic for evaluating the extent to which poor residents in particular can trust their local government. Although economists have documented high levels of economic inequality within neighborhoods in African and Latin American countries, and political scientists have shown the importance of neighborhood dynamics for democracy in the current era of government decentralization in the developing world, the importance of neighborhood inequality for shaping trust in local government has rarely been studied. As such, our research fills an important gap in the literature and confirms the political relevance of the neighborhood as a unit of analysis.

The fieldwork that serves as the basis for this project entailed the collection of census, public opinion, and systematic observation data within resident-identified neighborhood borders as opposed to using pre-determined and arbitrary administrative units like clusters of census tracts. The data were collected in each of 71 neighborhoods sampled from six municipalities in El Salvador. Our empirical analysis of these data relies on multilevel models that incorporate measures of both individual-level characteristics and neighborhood context to test our argument. As our theory predicts, we find that among the poorest third of respondents, the perceived performance of the local government in the provision of public services becomes unimportant as a predictor of trust in local government when they reside in neighborhoods where access to services and goods is highly unequally distributed across households. These findings imply that trust in local government can only be broadly fostered across individuals of different socio-economic backgrounds when a government signals distributive fairness for the poor in addition to high effectiveness in public service provision.

13 Baker et al. 2006; Canache 1996.
Our findings carry with them important policy implications. They suggest that government decentralization is more likely to promote widespread political trust if local governments implement development strategies that tackle within neighborhood inequality in addition to shortcomings in service quality. We provide evidence that, at the highest levels of neighborhood inequality, local governments may be unable to broadly increase perceptions of government legitimacy through investments in the quality of public services alone. Thus, in spite of the fixed costs associated with putting in place progressive policies to alleviate inequality in living conditions at the neighborhood level, the long-term payoff of doing so may prove highly beneficial to local governments and, by extension, the national political system.

Determinants of Political Trust

Political trust is typically defined as “a basic evaluative orientation toward the government founded on how well the government is operating according to people’s normative expectations.”\(^{14}\) Consistent with this definition, numerous studies have demonstrated that citizens’ perceptions of government performance in the delivery of expected policy outcomes are critical for building trust in government in both developed and developing countries.\(^{15}\) For example, scholars studying trust in local governments in the United States have concluded that subjective evaluations of the quality of services provided by the local government is one of the main determinants of political trust.\(^{16}\) Similarly, in the context of developing countries, Bratton finds that citizens in Africa inform their views about local government “by instrumental attitudes about whether governments deliver the goods.”\(^{17}\) In the Latin American context, individual-level

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\(^{14}\) Hetherington 1998, 791 (emphasis added).
\(^{15}\) e.g., Mishler and Rose 2001; Hetherington 2005; Espinal, et al. 2006; Wolak and Palus 2010.
\(^{16}\) Rahn and Rudolph 2002.
\(^{17}\) Bratton 2012, 517.
studies on the determinants of trust in local government have found similar results. Each of these studies echo the argument that “political trust is politically endogenous…it is a consequence, not a cause, of institutional performance.”

Despite compelling evidence that perceptions of government performance lead to institutional trust, research in the field of public administration indicates that this is not always the case. In some contexts or for some citizens, developing trust in local government requires more than a government’s demonstrated capacity to “deliver the goods.” In other words, political trust is not always determined by perceived government performance, as typically assumed. This is precisely the puzzle that motivates our research question: under what conditions are perceptions of government performance insufficient to promote institutional trust? We argue that part of the disjunction between evaluations of local government performance and political trust can be explained by the fact that some citizens are more likely to prioritize the fairness of government over their perceptions of government performance. Thus, we maintain that some citizens value fairness as a “normative expectation” of government action in addition to their expectation for high quality performance.

A substantial body of research suggests that an important criterion for trusting government is the perception that governmental authorities make decisions and distribute public goods and services fairly. As Levi puts it, “individuals also need to have evidence that government is relatively fair … if they are to have confidence that the state will harmonize the interest of otherwise competitive parties.” In other words, many people want government to

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18 Montalvo 2010.
20 Van Ryzin 2011; Van de Walle and Bouckaert 2003; Yang and Holzer 2006.
demonstrate a “lack of bias or favoritism” towards certain groups in society, especially if they believe that they would lose out from such favoritism.

While these theoretical insights are valuable for understanding the importance of evaluations of fairness in the formation of trust in government, two questions remain understudied: 1) how do perceptions of fairness form?, and 2) under what conditions are citizens likely to place a higher priority on a government’s fairness over its performance when evaluating trust in local government? Fairness Heuristic Theory (FHT) provides a framework for answering the first question. FHT maintains that individuals value fairness information when deciding whether to trust authorities. Individuals turn to fairness assessments because they often lack readily available objective information on whether authorities can be trusted. Making a wrong judgment can be quite costly given that an overestimation of how much one can trust an entity with power may increase the chances for future exploitation or exclusion from valuable benefits. Accordingly, FHT posits that individuals use perceived fairness of past outcomes or current conditions as a heuristic to help make a judgment about the level of trust to cede. FHT further maintains that citizens draw on the fairness information that is most easily accessible in their social environment.

Moreover, according to FHT, fairness judgments are based on judgments of both distributive justice and procedural justice. Distributive fairness judgments include perceptions of equity in the distribution of outcomes or the belief that authorities have allocated to a given individual what she deserves. A core assumption underlying the notion of distributive fairness is that individuals evaluate whether they have received a fair share by comparing their allocation to

23 Van Ryzin 2011, 747.
25 Tost and Lind 2010.
that of others in a given reference group. Consequently, perceptions of distributive fairness are central to theoretical frameworks that consider relative deprivation as a trigger of social discontent. Procedural fairness judgments, on the other hand, assess the procedures by which policy decisions are made or through which outcomes are delivered, independently of how outcomes are distributed. For example, as Van Ryzin suggests, citizens who have witnessed corruption when dealing with their local government are unlikely to perceive procedures as fair. Similarly, citizens are unlikely to perceive procedural fairness if they have not been given a chance to voice their policy preferences or have been excluded from the policy making process. While we incorporate measures of both distributive and procedural fairness in our analyses, the role of distributive fairness judgments is especially important for our argument about the impact of economic inequality on trust in local government.

We theorize that citizens’ observations of economic inequality in their neighborhood provide them with heuristic information related to the local government’s distributive fairness, or equity in the delivery of goods and services, independent of evaluations of government performance or the quality of policy outcomes. Moreover, we posit that this distributional evidence will provide the basis for their level of trust in the local government. Yet not all individuals should be equally attentive to signals of distributive fairness. Because the poor bear a much greater cost from inequality given that they are the ones who face deprivation in a relative sense, residents with the lowest economic status should be more likely to use observations of neighborhood inequality to evaluate the trustworthiness of local government. By contrast, the

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26 Tyler and Van der Toorn 2013, 631.
27 Van Ryzin 2011.
relatively affluent should be less concerned with distributive fairness and neighborhood inequality, ceteris paribus.

FHT also helps to highlight the conditions under which citizens are likely to place greater weight on distributive fairness over performance when assessing local government trust. Poor citizens who live in highly unequal neighborhoods are expected to attach greater weight to distributive fairness than local government performance when determining their local government’s trustworthiness. For the poor, improvements to the quality of services, such as keeping public spaces clean or renovating a park or soccer field are unlikely to be viewed as providing for their basic needs. Thus, the effects of perceptions of government performance on political trust will depend on perceptions of distributive fairness based on observations of economic inequality in the neighborhood and the economic standing of the individual. The poor will place higher value on fairness while the affluent will value government performance regardless of economic disparities in their neighborhood. Consequently, while the bulk of the literature that examines the attitudinal impacts of economic inequality has focused on variables such as social trust (Rothstein and Uslaner 2005; Uslaner 2002), or more generally examined how contextual factors conditions the effects of social trust (Jamal and Nooruddin 2010), in this article we examine the impacts of contextual inequality on trust toward local government, and explore the consequences of economic inequality at a level of analysis rarely considered: the neighborhood.
proximity plays in determining an individuals’ personal and impersonal social encounters. Although an individual can avoid certain parts of the city or municipality where she lives, she cannot avoid her neighborhood of residence and thus will inevitably encounter other neighborhood residents. Given that social interactions serve as a crucial source of political information, Huckfeldt posits that social experiences within one’s neighborhood influence citizens’ political attitudes and behaviors.

In particular, he points to neighborhood composition as an important factor that conditions residents’ political orientations. Heterogeneous neighborhoods are more likely to trigger “dissonant” political reactions among residents who do not identify with the elite or dominant group. This applies equally to economic heterogeneity. Social class inequality may spur neighborhood-based political conflict because it may lead economically disadvantaged residents to perceive that a given political institution or actor takes sides with a relatively economically privileged group.

Thus, to explicitly make the connection between Fairness Heuristic Theory and Huckfeldt’s insights, we theorize that the level of economic inequality within the neighborhood will shape low economic status residents’ evaluations of a local government’s distributive fairness and thereby impact trust in that government. More specifically, the poor form their perceptions of distributive fairness as they share information about other neighbors with those in their immediate social circle within the neighborhood or simply through observation of their neighbors. Evidence based on research in the United States is consistent with this account. For example, Luttmer finds that inequality in personal earnings among neighbors leads to a sense of

31 Huckfeldt 1986.
32 Ibid., 18-19.
personal deprivation for the less affluent. Although one rarely has direct knowledge of the salary of one’s neighbors, observable signals of that salary or more generalized economic success like the appearance of a new car in the driveway or building an addition to a home may provide readily observable ways to monitor the economic situation of one’s neighbors even without direct information-sharing. One way or another, people will tend to know where they stand economically in relation to their neighbors, arguably much more so than in relation to residents of other parts of the country, province, or even municipality given the factor of residential proximity.

The Relevance of the Neighborhood for Local Governance in Latin America

Although our theory is general, we argue that the neighborhood is particularly important for shaping perceptions of local government fairness and legitimacy in the current era of government decentralization in Latin America. Thus, while we do not disregard the possibility that neighborhood context might affect citizen attitudes towards other political institutions, such as the national government, we see an even stronger connection between neighborhood context and evaluations of local government in the context of Latin America. As we explain in this section, this is in no small part because decentralization reforms in this region substantially increased the salience of the neighborhood as a social space for citizens’ political participation and involvement with the policy-making processes of local governments.

Under decentralization, central governments in Latin America devolved power to local governments with the objective of “bringing the state closer to the people.” The expectation for this process was that localized information and citizen participation in deliberative governance at

33 Luttmer 2005.
34 Selee 2004.
the local level would result in improved governance in terms of both performance and equity.35 As the process of decentralization gave distributive and budgetary responsibilities to local governments in an effort to ensure a more equitable distribution of resources and better quality services, local governments turned to sub-municipal organizations to help aggregate political interests and organize the allocation of public resources.36 Campbell notes that “with more power and money at their disposal, local officials began to see the importance of listening to voices from ‘below,’ that is, tapping into the sentiments of voters, citizen groups, and neighborhood organizations as a part of making plans and budget tradeoffs.”37 Thus, in many municipalities in the region, citizens now participate in the local policy-making process primarily through their neighborhood.38 In fact, neighborhood organizations often times give residents a voice in local governmental budgetary decisions regarding the allocation and distribution of resources.39

In the case of El Salvador, the focal country of this paper, its recent history reflects the regional trends in decentralization and the increasing importance of neighborhood politics in the region. The Municipal Code (Código Municipal), which regulates the establishment and functions of Salvadoran municipalities, actively encourages the legal constitution of neighborhood associations. Specifically, it mandates periodic meetings between members of neighborhood associations and their local government to assess and solve neighborhood problems. Salvadorans have the opportunity to participate in public policy decisions at the sub-municipal level through Neighborhood Sector Consultations (Consulta Vecinal Sectorial) and

35 e.g., Bardhan 1996; Faguet 2012.
36 Eaton 2012.
37 Campbell 2003, 79.
38 Canel 2010.
participatory budgeting meetings. Survey data from the 2010 AmericasBarometer confirms the importance of the neighborhood as a space for political deliberation in El Salvador: about 27 percent of the adult population in El Salvador reports participation in meetings of a neighborhood improvement committee at least once a year. This rate is statistically indistinguishable from the level of participation in neighborhood associations of citizens in the twenty other Central American and South American countries represented in the 2010 AmericasBarometer survey (i.e., 27.8 percent).

Notably, in the Salvadoran context, the rhetoric of ensuring both quality outcomes and equitable provision of services at the neighborhood level and the importance of neighborhood associations to fulfill that goal is also one of the central talking points used by political parties during and after political campaigns. The following excerpt from the 2009 inaugural speech of the mayor-elect of El Salvador’s capital city, San Salvador, illustrates this point:

“Today I want to remind the Salvadoran voters what they voted for, what our vision is for the city, and tell them what our plan is…Over the last year during our campaign we visited thousands of homes in every district, from every social class; we met with neighborhood associations seeking an authentic participatory citizenship to nurture our plan of government…You will see me walking through various parts of the city aware that the mayor is the jurisdictional, administrative official who is closest to the citizens but above all that this is the way to best understand reality to then confront it. You will see me in Siberias, in Chacra, in San Jacinto, in Colonia Satelite…and in every community…resolving problems with neighbors, and I will stay especially close to the neediest families with special programs to support their needs and quality of life.”

Given the substantial changes in state-society relationships wrought by decentralization in this and other countries in the region and with the ascent of the neighborhood as an important space for making decisions about the allocation and distribution of resources, we argue that the heuristic information provided by neighborhood inequality will be particularly relevant for the

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40 Torres and López 2008. 
41 Translation by the authors. The full speech in Spanish can be accessed at http://www.youtube.com/watch?v=9mkHyxNAoe4
poor to evaluate whether their local government has acted fairly and implemented equitable public policies. Latin America provides a propitious setting to test the overall theory we propose here given that the high levels of economic inequality observed across the region⁴² are reflected at the local level in high inequality within neighborhoods.⁴³

**Hypotheses**

Following our theoretical discussion, we posit that high levels of inequality in living conditions within neighborhoods will undermine the level of trust in local government among the relatively poor because they are the ones who are more likely to perceive that their preferences and needs have not been taken into account in the policy making process. Moreover, we argue that high levels of neighborhood inequality will lower political trust among the relatively poor even if they perceive that the local government has provided good quality services. More concretely, we propose the following two complementary hypotheses:

**H1**: High economic inequality within neighborhoods will have a negative effect on trust in local government, particularly among residents with the lowest relative socioeconomic status.

**H2**: High economic inequality within neighborhoods will attenuate the positive effect of perceptions of government performance on trust in local government, particularly among residents with the lowest relative socioeconomic status.

We illustrate these two hypotheses in Figure 1. As can be observed, among low economic status neighborhood residents we expect to find a negative relationship between neighborhood inequality and trust in local government. On the other hand, among better-off residents, trust in

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⁴² López-Calva and Lustig 2010.
local government will not be dependent on neighborhood inequality, as depicted by the flat lines. In addition, we expect perceptions of local government performance to matter in the development of trust in local government on average; however, this is conditional on both contextual inequality and individual socioeconomic status.

**Figure 1. Illustrative Hypotheses**

As shown with the lines representing the poor in Figure 1, at high levels of inequality, we hypothesize that perceptions of high government performance will not be associated with a higher level of trust in local government relative to perceptions of low government performance; however, at low levels of inequality, perceptions of high performance will be associated with a higher level of trust compared to perceptions of low performance. In contrast, for the relatively wealthy, perceptions of high government performance will correlate with a higher level of trust in local government relative to perceptions of low government performance at all levels of contextual inequality. In our empirical analysis we are looking for evidence of these patterns to assess the validity of our hypotheses.
Research Design

To conduct our empirical tests we rely on an original dataset collected in 2010 and 2011 that includes information for 71 neighborhoods selected across six municipalities (i.e., local government jurisdictions) in El Salvador: Santa Ana, Chalchuapa, San Juan Opico, Zaragoza, Santa Tecla, and the capital city, San Salvador. As in previous neighborhood-level studies for the United States, the selection of municipalities, neighborhoods, and individuals within neighborhoods was designed to increase the variance of socio-economic characteristics across different units of analysis in our sample. Although the six municipalities selected are located in the same region of the country, they have very different levels of socio-economic development. The municipalities of San Salvador, Santa Tecla, and Santa Ana are among the most urbanized and developed in the country. On the other hand, Chalchuapa, San Juan Opico, and Zaragoza are much poorer and more rural.

Within each municipality there are also very marked differences in the extent of poverty across and within neighborhoods. To ensure that the sample would contain both poor and relatively affluent neighborhoods, the universe of neighborhoods in each municipality was classified into two groups based on a poverty threshold. Randomized neighborhood selections were then taken within each group. The resulting sample includes neighborhoods with very different socio-economic characteristics and is large enough to allow us to explore individual and neighborhood level effects with a high level of statistical precision.

Three different forms of data were collected across the 71 selected neighborhoods using original questionnaires designed to study neighborhood patterns in El Salvador: a census, a census.

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44 e.g., Huckfeldt and Sprague, 1995.  
45 The selection of neighborhoods was based on data from the 2007 census provided by the census bureau in El Salvador.
public opinion survey, and a systematic observation of each neighborhood. The census was used to enumerate all households, to obtain information on the number of blocks in each selected neighborhood, and to collect information on household characteristics within blocks. Although the 2007 national census data made available by the census bureau was useful for the selection of neighborhoods within each municipality, it only provided observations for clustered census tracts, which did not necessarily coincide with actual neighborhood borders. In contrast, the census carried out for this study provided the opportunity to ensure that neighborhood indicators based on the census data as well as the survey and the systematic observation were gathered within the borders of resident-defined neighborhoods.

As dwellings were enumerated for the collection of the census data, maps were drawn in consultation with neighborhood leaders to identify neighborhood borders. As Wong et al. argue, “pictures in our heads do not resemble governmental administrative units in shape or content,” which can compromise the validity of studies that rely solely on geographic units defined by census bureaus to examine contextual effects on citizen attitudes. By involving residents in the demarcation of their neighborhood’s borders during the collection of our own census data, the design of our study overcomes that constraint and therefore ensures that our ecological analysis effectively captures social dynamics in geographic spaces that are meaningful to citizens.

The census data collected across the 71 neighborhoods resulted in observations for a total of 30,791 household members corresponding to 8,516 households. As described below, we use this census data to estimate our main independent variable at the neighborhood-level, relative living conditions (i.e., within neighborhood inequality), and to compute a control variable of the neighborhoods’ absolute living conditions (i.e., overall poverty level). This census data also

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46 Wong et al. 2012, 53.
served as the sampling frame for the design of the public opinion survey. The neighborhood census data reveal that neighborhoods in our sample vary substantially in size, ranging from 48 to 748 dwellings. However, even in the smallest neighborhoods, we find significant variation in the socio-economic characteristics of residents, which allows us to estimate an aggregate indicator of inequality based on the census data and also to draw a sample for the public opinion survey in each neighborhood with substantial variance in the socio-economic background of individuals.47

The public opinion survey was carried out face-to-face among the voting age population in each neighborhood (i.e., among individuals who were 18 years old or older). Accounting for population characteristics from the census data gathered for this study, survey respondents were randomly selected within neighborhoods based on a pre-established sex and age quota for each block. Only one household member was interviewed in each home. The total sample of the public opinion survey consists of 4,096 individual interviews across the 71 neighborhoods. The questionnaire of the public opinion survey contains items on a wide array of topics, including the key questions we use to measure attitudes toward political institutions and the local government, as well as questions on political participation, social capital, and residents’ experiences in their neighborhood.

Finally, following previous work in sociology,48 a “systematic observation” questionnaire was administered with the purpose of collecting information on the physical condition of public spaces in each block of the 71 neighborhoods. Trained observers visited each neighborhood and

47 Table A1 in the online appendix presents the total number of dwellings in each neighborhood reflected in the census data we collected. In addition, we present descriptive statistics of the socio-economic characteristics of residents in each neighborhood based on both the census and the public opinion data we gathered.
48 e.g., Sampson and Raudenbush 1999.
noted the presence or absence of “physical disorder” in public spaces or signs of deterioration in neighborhood conditions at the block level including the presence of garbage mounds, sewage or waste in the streets, or a lack of public lighting, among other.49 A total of 2,012 blocks were observed across the 71 neighborhoods. In this article, we use the systematic observation data to assess the robustness of our results to the inclusion of a “physical disorder” index, which objectively measures a neighborhood’s access to good quality public services.

Measurement and Methods

**Dependent Variable.** To measure trust in the local government, respondents were asked, “To what extent do you trust the municipal government?”50 Responses range from 1 (Not all) to 7 (A Lot). Based on the pooled results from the 4,096 individuals interviewed across the 71 neighborhoods, the average level of trust in the municipality is 4.53, which is not statistically different from the national average of 4.5 using the same survey item in the 2010 AmericasBarometer survey for El Salvador (n = 1,550), carried out by the Latin American Public Opinion Project (LAPOP). In addition, we find very small differences between our neighborhood-based sample and the LAPOP survey on key demographic characteristics, such as

49 The physical disorder index is calculated by first taking the count of whether observers made note of any of the following five items in the block-level observation: (1) garbage dumps or mounds of trash scattered outdoors throughout the area, (2) garbage or broken glass in the streets or on sidewalks, (3) empty lots with overgrown grass, (4) sewage or waste in the streets, and (5) lack of public electricity. The final index score is calculated at the neighborhood level by averaging the count scores for all the blocks within each neighborhood.

50 Questionnaires were pre-tested in El Salvador and customized to the country’s lexicon. The wording in Spanish of the survey item on trust in local government reads, “¿Hasta qué punto tiene usted confianza en su municipalidad?” The word “municipalidad” makes direct reference to the local government in Spanish speaking countries in Latin America, including El Salvador. The same survey wording is used in the LAPOP national surveys. For more details on the measurement, descriptive statistics, and wording of the variables we employ in this article see Table A2-A4 in the online appendix.
education, gender, and age. Thus, we are confident that our neighborhood-based sample as a whole reflects the general contours of El Salvador’s population.51

Comparing levels of trust in local government across the 71 neighborhoods, however, we find considerable variation, with mean values of trust ranging from a low of 3.6 to a high of 5.3 on the 7-point scale, with a standard deviation of 0.32. The results of a one-way ANOVA variance decomposition test confirm that the variation in trust across neighborhoods is statistically significant (F=2.53; p<0.001), which suggests that neighborhood contextual factors may account for the heterogeneity.

**Independent Variables at the Neighborhood-Level.** At the neighborhood level, we examine the impact of inequality within neighborhoods (i.e., citizens’ relative living conditions) on trust in local government, controlling for the neighborhood’s overall poverty level (i.e., absolute living conditions) and its vulnerability to crime and violence. Our neighborhood inequality measure was computed based on the census data collected for this study, using the methodology developed by McKenzie,52 which is based on household assets and Principal Component Analysis (PCA). McKenzie’s methodology has been widely used to measure inequality in living standards in the absence of income data.53 As demonstrated by MacKenzie, the index yields reliable measures of inequality in standards of living at the subnational level and has been found to be strongly associated with traditional income-based measures of income inequality, such as the Gini coefficient. Formally, MacKenzie’s index is defined as follows:

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51 Table A5 in the online appendix compares demographic characteristics of respondents in our neighborhood based sample to those in the 2010 nationally representative sample collected by LAPOP.
52 McKenzie 2005.
53 e.g., Labonne and Chase 2009.
where, for a given list of household assets, $\sigma_j$ is the sample standard deviation of the first principal component factor $y_i$, across households in neighborhood $j$ and $\lambda$ is the largest eigenvalue or variance of $y_i$ over the whole sample, typically the national sample. The first principal component factor across households $y_i$, for household assets $x_k$, is the linear combination:

$$y_i = \alpha_1 \left( \frac{x_1 - \bar{x}_k}{s_1} \right) + \alpha_2 \left( \frac{x_2 - \bar{x}_k}{s_2} \right) + \ldots + \alpha_k \left( \frac{x_k - \bar{x}_k}{s_k} \right)$$

where $\bar{x}_k$ and $s_k$ are the mean and standard deviation of asset $x_k$ and $\alpha$ represents the weight for each asset $x_k$. The first principal component $y_i$ yields a wealth index that assigns a larger weight to assets that vary the most across households so that an asset found in all households is given a weight of zero.54 Thus, a luxury asset such as a vehicle or a computer is weighted more heavily to reflect a higher individual socio-economic status.

In this article, scores based on the McKenzie index, $I_j$, greater than, less than, or equal to 1.00, indicate that a given neighborhood shows a higher, a lower, or the same level of inequality as the national average, respectively.55 Our measure of neighborhood inequality was computed based on 13 household assets.56 Across the 71 neighborhoods included in the sample, the

54 McKenzie 2005.
55 As a reference value, we use the overall level of inequality in the nation, based on household assets data from the 2010 national AmericasBarometer survey for El Salvador. The census questionnaire administered at the neighborhood level contains the same battery of questions on household assets included in the national AmericasBarometer survey, making it possible to compare neighborhood and national level estimates using the first principal component methodology.
56 MacKenzie’s index was computed based on each respondent’s report of whether or not they possess the following household assets: television, refrigerator, landline telephone, cellular
observed level of inequality ranges from about 0.60 to 1.40 points, indicating that neighborhoods with the lowest and highest levels of inequality, respectively, show about 40 percent lower and 40 percent higher inequality than the nation as a whole. Consequently, our study further confirms the high levels of inequality within neighborhoods in the Latin American context found in previous studies, with the qualification that there is significant variation in those levels.

We also include a measure of absolute living conditions in the neighborhood to ensure that the effect of inequality within neighborhoods on trust in local government is independent of the overall poverty level. To measure absolute neighborhood conditions, we compute an index based on the census data gathered for this study using the widely employed Unsatisfied Basic Needs (UBN) methodology as described by Méndez and Trejos.57 The index measures the percentage of households with at least one unsatisfied basic need across four dimensions: housing, health, education, and consumption capacity. Unlike McKenzie’s measure of inequality, the UBN index does not reflect the social distance across households in a given neighborhood, only the extent of that neighborhood’s socio-economic disadvantage. Thus, each index (i.e., the McKenzie index of asset inequality and the UBN index of poverty) taps into theoretically distinct dimensions of neighborhood development. Across the 71 neighborhoods included in our sample, the percentage of households with at least one unsatisfied basic needs ranges from 2 to 100.

We also control for neighborhood vulnerability to crime and violence, because neighborhood insecurity is likely to be related to our core neighborhood variables of inequality and poverty, as well as trust in local government. Our measure of neighborhood crime is based on responses to seven items in the opinion survey that asked respondents whether they had

57 Méndez and Trejos 2004.
knowledge of the following seven acts occurring in the last twelve months in their neighborhood: robberies, damage to private property, sale of illegal drugs, extortions, sexual violence, kidnappings, and murders. The index measures the average number of crimes (from the list of seven possible crimes) that respondents reported in each neighborhood and varies between 0 and 7, meaning that there are neighborhoods where all of the respondents in that neighborhood reported having knowledge of occurrences of all seven of the possible crimes on the list during the previous twelve months and neighborhoods where no respondent had knowledge of any occurrence of those crimes. Our data indicate that although El Salvador as a whole has one of the highest crime rates in the world, violence is highly concentrated in certain neighborhoods, indicating that neighborhood crime is possibly an important competing contextual determinant of trust in government.

*Independent Variables at the Individual-Level.* At the individual level, our two core independent variables are personal socio-economic status and perceptions of local government performance. We measure these two variables using data from the public opinion survey. Items on household asset ownership were used to assess personal socio-economic status by arraying respondents into high, medium and low “terciles of wealth,” based on the wealth index, $y_t$, described above, computed using the PCA methodology. Our theoretical focus is to examine how economic inequality within neighborhoods affects levels of trust in local government across terciles of wealth and the effect of neighborhood inequality across terciles of wealth as perceptions of local government performance vary.

*Perceptions of local government performance* are assessed by asking respondents, “would you say that the services the municipal government is providing to the people are…Very

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58 UNODC 2013.
good, Good, Neither good nor bad, Bad or Very bad.” 59 The scale is recoded to a 1 (Very Bad) to 5 (Very Good) scale. We find a high degree of correspondence between perceptions of lower service quality at the neighborhood level and greater physical disorder in the neighborhood observed by our trained observers (a correlation of -0.50, p<.001), which indicates that residents take into account the quality of public services in their neighborhood when they answer this survey question. Thus, even though citizens may take into account municipal-level service quality when providing their subjective evaluations of local government performance, their opinion also reflects the objective provision of services in their neighborhoods. Moreover, the data show that equal portions—i.e., 31%—of the poorest individuals (i.e., the first tercile of wealth) and the wealthiest individuals (the third tercile) in our sample perceive that the local government is providing “very good” quality services. The question then becomes, do poor individuals who think their local government is providing quality services also show high levels of trust toward the government? We hypothesize that poor individuals living in neighborhoods with high levels of inequality are unlikely to do so.

We also include a series of control variables at the individual level. Because an individual’s trust in local government is also likely to be based on their support for the incumbent party, partisan predilections must be included as an important control variable in the analysis below. Indeed, a growing body of research in political psychology shows that partisan sympathies bias citizens’ political judgments in numerous ways. Partisan sympathizers are more amenable to cues and issue frames of party elites, and partisan identities promote strong affective and cognitive biases, such as motivated reasoning, in the way partisans attend to and weigh

59 In Spanish, this survey item reads “Diría usted que los servicios que la municipalidad está dando a la gente son: Muy buenos, Buenos, Ni buenos ni malos, Malos, o Muy malos.”
evidence that reflects on the reputation of the political party they favor.\textsuperscript{60} Partisan biases tend to be particularly important across the divide between electoral winners and losers.\textsuperscript{61} We should then expect that survey respondents’ level of trust in their local government will be a product not only of the perceived performance of the government, but also a reflection of their preexisting partisan identity. Thus, in the empirical models that follow, we control for such partisan congruence bias using a measure of whether the respondent reports having voted for the incumbent party in the previous municipal election, the only variable available in the survey that taps into political party preferences at the local level.

We also include three measures of potential sources of distrust in local government in our empirical analyses: respondents’ personal experiences with crime committed in the neighborhood, their fear of being a victim of a crime in the neighborhood, and their personal experiences with corruption involving local government officials. Finally, we include controls for various other behavioral and attitudinal variables associated with political trust. Because the literature suggests that citizen participation increases confidence in government,\textsuperscript{62} we include control variables on participation in neighborhood associations and participation in meetings convened by the local government, with the expectation that participation in local affairs will enhance trust in local government. As noted previously, the variables on experience with corruption and participation in local government meetings are likely to capture the effect of citizens’ assessment of government \textit{procedural} fairness on their level of political trust.

Regarding citizen attitudes, the social capital literature suggests that individuals who are sympathetic to their fellow citizens and live in places characterized by solidarity and cooperation

\textsuperscript{60} Kam 2005; Slothuus and de Vreese 2010; Taber and Lodge 2006.  
\textsuperscript{61} Anderson et al. 2005.  
\textsuperscript{62} Brehm and Rahn 1997.
will have a higher level of trust in government, because those communities will be more participatory and thus promote better performing governments. To account for residents’ rating of the extent of solidarity and cooperation in their neighborhood, we control for an index of social cohesion. Lastly, the models also control for standard socio-demographic characteristics: age, sex, and the respondent’s years of schooling.

**Methods.** We rely on multilevel modeling techniques to take into account the nested structure of our data in the estimation of standard errors. Specifically, we estimate a two-level multilevel model to account for the fact that an individual in our sample resides in a given neighborhood. Thus, the intercept of the model is allowed to vary randomly across neighborhoods. Moreover, our multilevel analysis controls for likely differences across municipalities by incorporating dummy variables (i.e., fixed effects) for the municipalities included in our sample, thus minimizing the possibility that our results are driven by local dynamics present in a given municipality. Given that our dependent variable is ordinal, we estimate a two-level ordered logistic multilevel model.

Moreover, because the expectation is that the level of trust in local government among residents with the lowest socio-economic status will depend on the extent of neighborhood

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63 Putnam 1993.
64 See Sampson et al. 1997. The social cohesion index is measured based on responses indicating agreement with the following statements: “When there is a problem in the neighborhood, the neighbors usually organize themselves to try to fix it,” “This is a unified neighborhood,” “People around here are willing to help their neighbors,” “People in this neighborhood generally get along with each other,” “People in this neighborhood share the same values.” These items form a unidimensional index with a Cronbach’s alpha of 0.85.
65 Gelman and Hill 2007.
66 If we do not include dummy variables for each municipality in our models, however, our results remain substantially unchanged.
67 The multilevel analysis presented here was carried out in STATA 13 using the “meologit” command.
inequality, in our model testing the first hypothesis, we allow the slope of the lowest tercile of wealth to vary randomly across neighborhoods. The multilevel model that tests the second hypothesis also allows the slope of the variable on perceptions of local government performance to vary randomly across neighborhoods given that we theorize that the effect of this variable on trust depends on individuals’ socio-economic status but also on neighborhood characteristics (i.e., the level of inequality). The model specification for testing hypotheses 1 and 2 is as follows:

**Model 1:**

\[ TrustLocalGov_{ij} = \beta_0 + \alpha_1 Inequality_{1j} + \alpha_2 Poverty_{2j} + \alpha_3 Neigh.Crime_{3j} + \beta_1 Tercile 1_{1ij} + \beta_2 Tercile 2_{2ij} + \gamma_1 Inequality_{1j} \times Tercile 1_{1ij} + \gamma_2 Inequality_{1j} \times Tercile 2_{2ij} + \beta_3 Perc. Gov. Performance_{3ij} + \ldots + \beta_n X_{nij} + \ldots + \text{Error Term} \]

where, \( \beta_n X_{nij} \) are individual level control variables.

Notice that this first model, associated with hypothesis 1, includes two cross-level interactions: \( \gamma_1 Inequality_{1j} \times Tercile 1_{1ij} \) and \( \gamma_2 Inequality_{1j} \times Tercile 2_{2ij} \). Our expectation is to find a significant negative effect for the former (i.e. \( \gamma_1 < 0 \)), indicating that higher levels of neighborhood inequality decreases trust in local government particularly among individuals with the lowest socioeconomic status. We include both interaction terms to be able to test this hypothesis and thus examine if neighborhood inequality mainly affects the poorest individuals as we argue.

**Model 2:**

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68 See Figure 1 for a graphical representation of this expectation.
Model 2, associated with hypothesis 2, includes a three-way cross-level interaction between neighborhood inequality, perceptions of government performance, and the lowest tercile of wealth. The coefficient associated with the triple interaction is expected to be negative (i.e., $\gamma_4 < 0$), meaning that the interaction we identify in Hypothesis 1 also varies across levels of perceived service quality. To simplify the model slightly, because our theoretical expectation is to find that neighborhood inequality will primarily affect the poorest individuals or those in the lowest tercile of wealth, the model testing the second hypothesis compares individuals in the lowest tercile to those in the second and third as a single reference category. In the online appendix we show that the results remain substantively unchanged if we specify our three-way interaction model comparing the first to the third tercile and the second to the third tercile, as we do in the first model.69

Results

To show baseline effects, we first present a model without the inclusion of our hypothesized interactions (see Baseline Model in Table 1). As can be seen, inequality within neighborhoods stands out as a significant contextual predictor of trust in local government. On average, high neighborhood inequality is associated with lower levels of trust in local government; yet overall poverty (Absolute Living Conditions in the Neighborhood) does not

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69 As can be observed in Table A9 in the online appendix, this model specification entails the inclusion of two three-way interaction terms in the model: Inequality*Perceptions of Government Performance*Tercile 1 and Inequality*Perceptions of Government Performance*Tercile 2.
exert a significant effect on trust. Consequently, all else equal, relative, but not absolute, living conditions in the neighborhood influence citizens’ trust in local government. We also find that individuals living in neighborhoods with a high incidence of crime and violence are significantly less likely to trust their local government.
Table 1. Determinants of Trust in Local Government (Neighborhood Level Variables in Italics)

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Coeff. (Model 1)</th>
<th>Std. Error (Model 1)</th>
<th>Coeff. (Model 2)</th>
<th>Std. Error (Model 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality within the Neighborhood</td>
<td>-0.777*</td>
<td>0.368</td>
<td>-0.222</td>
<td>0.526</td>
</tr>
<tr>
<td>Absolute Living Conditions in Neighborhood (Overall Poverty)</td>
<td>0.127</td>
<td>0.215</td>
<td>0.078</td>
<td>0.211</td>
</tr>
<tr>
<td>Neighborhood Crime</td>
<td>-0.066*</td>
<td>0.026</td>
<td>-0.062*</td>
<td>0.026</td>
</tr>
<tr>
<td>Tercile of Wealth 1 (=1; Tercile 3=0)</td>
<td>-0.146*</td>
<td>0.073</td>
<td>1.043+</td>
<td>0.584</td>
</tr>
<tr>
<td>Tercile of Wealth 2 (=1; Tercile 3=0)</td>
<td>-0.130+</td>
<td>0.075</td>
<td>0.090</td>
<td>0.532</td>
</tr>
<tr>
<td>Tercile of Wealth 1 x Neighborhood Inequality</td>
<td>-1.341*</td>
<td>0.661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tercile of Wealth 2 x Neighborhood Inequality</td>
<td>-0.243</td>
<td>0.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of Government Performance in Service Provision</td>
<td>0.769***</td>
<td>0.041</td>
<td>0.773***</td>
<td>0.041</td>
</tr>
<tr>
<td>Voted for Incumbent Political Party (=1; Voted for Opposition=0)</td>
<td>0.096</td>
<td>0.082</td>
<td>0.088</td>
<td>0.082</td>
</tr>
<tr>
<td>Did not Vote (=1; Voted for Opposition=0)</td>
<td>-0.072</td>
<td>0.079</td>
<td>-0.079</td>
<td>0.080</td>
</tr>
<tr>
<td>Did not Reveal Voting Behavior (=1; Voted for Opposition=0)</td>
<td>-0.151+</td>
<td>0.085</td>
<td>-0.154+</td>
<td>0.085</td>
</tr>
<tr>
<td>Asked for a Bribe (=1; 0=No Bribe)</td>
<td>-0.447*</td>
<td>0.194</td>
<td>-0.438*</td>
<td>0.195</td>
</tr>
<tr>
<td>No Contact with Municipality (=1; 0=No Bribe)</td>
<td>0.005</td>
<td>0.084</td>
<td>0.013</td>
<td>0.085</td>
</tr>
<tr>
<td>Attended Local Government Meeting (=1; No=0)</td>
<td>0.224</td>
<td>0.153</td>
<td>0.234</td>
<td>0.154</td>
</tr>
<tr>
<td>Attended Community Meetings (=1; No=0)</td>
<td>-0.054</td>
<td>0.101</td>
<td>-0.057</td>
<td>0.101</td>
</tr>
<tr>
<td>Social Cohesion in Neighborhood</td>
<td>0.006***</td>
<td>0.002</td>
<td>0.006***</td>
<td>0.002</td>
</tr>
<tr>
<td>Victimized by Crime in the Neighborhood (=1; No=0)</td>
<td>-0.335**</td>
<td>0.120</td>
<td>-0.351**</td>
<td>0.120</td>
</tr>
<tr>
<td>Fear of being Victimized by Crime in the neighborhood</td>
<td>-0.002+</td>
<td>0.001</td>
<td>-0.002+</td>
<td>0.001</td>
</tr>
<tr>
<td>Years of Schooling</td>
<td>-0.001</td>
<td>0.008</td>
<td>-0.002</td>
<td>0.008</td>
</tr>
<tr>
<td>Sex (Female=1; Male=0)</td>
<td>0.053</td>
<td>0.058</td>
<td>0.057</td>
<td>0.058</td>
</tr>
<tr>
<td>Age Cohort 1 (1=18-25; 0=46 or more)</td>
<td>-0.346***</td>
<td>0.085</td>
<td>-0.350***</td>
<td>0.085</td>
</tr>
<tr>
<td>Age Cohort 2 (1=26-35; 0=46 or more)</td>
<td>-0.293***</td>
<td>0.082</td>
<td>-0.291***</td>
<td>0.082</td>
</tr>
<tr>
<td>Age Cohort 3 (1=36-45; 0=46 or more)</td>
<td>-0.190*</td>
<td>0.080</td>
<td>-0.198*</td>
<td>0.080</td>
</tr>
<tr>
<td>San Juan Opico (=1; Chalchuapa=0)</td>
<td>0.009</td>
<td>0.157</td>
<td>0.039</td>
<td>0.155</td>
</tr>
<tr>
<td>Santa Ana</td>
<td>-0.049</td>
<td>0.132</td>
<td>-0.036</td>
<td>0.129</td>
</tr>
<tr>
<td>Zaragoza</td>
<td>-0.094</td>
<td>0.168</td>
<td>-0.074</td>
<td>0.165</td>
</tr>
<tr>
<td>Santa Tecla</td>
<td>0.110</td>
<td>0.199</td>
<td>0.098</td>
<td>0.194</td>
</tr>
<tr>
<td>San Salvador</td>
<td>0.240</td>
<td>0.173</td>
<td>0.282</td>
<td>0.172</td>
</tr>
</tbody>
</table>

*p<0.1; *p<0.05; **p<0.01; ***p<0.001. Standard errors in parenthesis. Two-level ordered logistic multilevel models. The two-way interaction model allows intercepts and slope of tercile of wealth 1 to vary randomly.
At the individual level, we find that, all else equal, perceptions of local government performance in service provision are strongly associated with trust in local government. By contrast, political partisanship has a weak effect. Individuals who reported voting for the winning party in the past mayoral election showed higher levels of trust than those voting for the losing party, but this effect faded once we include the variable on perceptions of government performance in the model. In addition, neighborhood residents who have been victims of crime in their neighborhood have lower levels of trust in local government. Moreover, as expected, neighborhood cohesion is positively related to trust; however, participation in meetings by neighborhood improvement associations have no independent impact on trust in local government. Regarding the effect of our proxy variables that are likely to capture the impact of assessments of procedural fairness (i.e., experience with corruption involving a local government official and participation in meetings convened by the local government), we find that only the indicator of local government corruption has a statistically significant effect. Individuals who have been asked for a bribe show lower levels of trust in local government.

Moving to the direct tests of our hypotheses, we find support for our first hypothesis in the Two Way Interaction Model of Table 1, where the coefficient for the cross-level effect of Tercile of Wealth 1* Neighborhood Inequality is statistically significant and negative. In other words, as expected, trust in local government is significantly lower among the lowest economic status residents who live in contexts of high neighborhood inequality. Indeed, when we carried out further tests and left the second and third terciles of wealth as the reference category (instead of only the third tercile as in Table 1), the coefficient for the interaction term between the first tercile and neighborhood inequality is still statistically significant, indicating that at high levels

70We report this result in Table A6 in the online appendix.
of inequality, the largest difference in levels of trust in local government surfaces between neighborhood residents with the lowest level of wealth and the rest of the population.71

Figure 2 illustrates the results of the significant two-way interaction shown in Model 2. At the highest level of neighborhood inequality the predicted probability of trusting the local government “a lot” (a score of ‘7’ on our dependent variable) is 5.3 percentage points among individuals in the first tercile of wealth, while at the lowest level of neighborhood inequality it is 15.1 percentage points.72 In this first analysis, we find that differences in the mean predicted probability of trusting the local government “a lot” between the poorest and richest residents are statistically significant (p<0.05) when neighborhood inequality is equal to or greater than the national average (the equivalent of a score of 1.00 on the MacKenzie index).73 Furthermore, trust toward local government among higher socio-economic status individuals is statistically unaffected by neighborhood inequality. This result is confirmed when we split the sample and run separate models for individuals in the first, second, and third terciles of wealth. Our split sample analysis shows that within neighborhood inequality only has a negative effect on trust in local government among individuals in the first tercile of wealth.74 This tendency is consistent with our expectations illustrated in Figure 1 above.

71 See Table A7 in the online appendix.
72 Predicted probabilities are estimated using the margins command in Stata 13.1 based on the results of the two-way interaction model presented in Table 1. Our conclusions remain substantively unchanged regardless of the cut point on the dependent variable used to estimate predicted probabilities. Independent of whether we consider response categories 5, 6, and 7 on the dependent variable as high trust, or if we only include response categories 6 and 7, the results are similar.
73 Figure A1 in the online appendix shows this result graphically. The statistical significance of differences in mean predicted probabilities was determined based on the Delta Method.
74 See online appendix Table A8.
Taking into account these first findings, we now proceed to explore the conditional effect of perceptions of government performance across economic groups while still accounting for neighborhood inequality. Table 2 presents the results of the model when we include a three-way interaction term between our variables for neighborhood inequality, individual perceptions of government performance, and the first tercile of wealth. As noted above, the reference category in this analysis corresponds to individuals in the second and third terciles of wealth. As observed in Table 2, the coefficient of the triple interaction term is negative and statistically significant (p<0.01).

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75 Notably, as previously mentioned, our conclusions remain unchanged when we test the second hypothesis and include tercile 1 and 2 as distinct categories and compare each of them to tercile 3. Only the three-way interaction associated with tercile of wealth 1 is statistically significant and negative, as expected. See online appendix A9.
Table 2. **Determinants of Trust in Local Government** (Neighborhood Level Variables in Italics)

<table>
<thead>
<tr>
<th>Three Way Interaction Model (Model 3)</th>
<th>Coeff</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality Within Neighborhood</td>
<td>0.603</td>
<td>(1.611)</td>
</tr>
<tr>
<td>Absolute Living Conditions in Neighborhood (Overall Poverty)</td>
<td>0.029</td>
<td>(0.220)</td>
</tr>
<tr>
<td>Neighborhood Crime</td>
<td>-0.053*</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Tercile of Wealth 1 (=1; tercile of wealth 2 and 3=0)</td>
<td>-3.724*</td>
<td>(1.848)</td>
</tr>
<tr>
<td>Tercile of Wealth 1 x Neighborhood Inequality</td>
<td>4.702*</td>
<td>(2.155)</td>
</tr>
<tr>
<td>Perception of Government Performance in Service Provision</td>
<td>1.067*</td>
<td>(0.428)</td>
</tr>
<tr>
<td>Tercile of Wealth 1 x Percep. Gov. Performance</td>
<td>1.467**</td>
<td>(0.550)</td>
</tr>
<tr>
<td>Percep. Gov. Performance x Neighborhood Inequality</td>
<td>-0.307</td>
<td>(0.491)</td>
</tr>
<tr>
<td>Tercile of Wealth 1 x Percep. Gov. Performance x Neighborhood Inequality</td>
<td>-1.833**</td>
<td>(0.640)</td>
</tr>
<tr>
<td>Voted for Incumbent Political Party (=1; Voted for Opposition=0)</td>
<td>0.084</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Did not Vote (=1; Voted for Opposition=0)</td>
<td>-0.087</td>
<td>(0.080)</td>
</tr>
<tr>
<td>Did Not Reveal Voting Behavior (=1; Voted for Opposition=0)</td>
<td>-0.162+</td>
<td>(0.085)</td>
</tr>
<tr>
<td>Asked for a Bribe (=1; No Bribe=0)</td>
<td>-0.400*</td>
<td>(0.197)</td>
</tr>
<tr>
<td>No Contact with Municipality (=1; No Bribe=0)</td>
<td>0.022</td>
<td>(0.085)</td>
</tr>
<tr>
<td>Attended Local Government Meeting (=1; No=0)</td>
<td>0.187</td>
<td>(0.156)</td>
</tr>
<tr>
<td>Attended Community Meetings (=1; No=0)</td>
<td>-0.046</td>
<td>(0.102)</td>
</tr>
<tr>
<td>Social Cohesion in Neighborhood</td>
<td>0.006***</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Victimized by Crime in the Neighborhood (=1; No=0)</td>
<td>-0.330**</td>
<td>(0.121)</td>
</tr>
<tr>
<td>Fear of being Victimized by Crime in the neighborhood</td>
<td>-0.002+</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Years of Schooling</td>
<td>-0.001</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Sex (Female=1; Male=0)</td>
<td>0.054</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Age Cohort 1 (1=18-25; 0=46 or more)</td>
<td>-0.351***</td>
<td>(0.086)</td>
</tr>
<tr>
<td>Age Cohort 2 (1=26-35; 0=46 or more)</td>
<td>-0.287***</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Age Cohort 3 (1=36-45; 0=46 or more)</td>
<td>-0.200*</td>
<td>(0.081)</td>
</tr>
<tr>
<td>San Juan Opico (=1; Chalchuapa=0)</td>
<td>0.045</td>
<td>(0.156)</td>
</tr>
<tr>
<td>Santa Ana</td>
<td>-0.021</td>
<td>(0.130)</td>
</tr>
<tr>
<td>Zaragoza</td>
<td>-0.049</td>
<td>(0.167)</td>
</tr>
<tr>
<td>Santa Tecla</td>
<td>0.135</td>
<td>(0.199)</td>
</tr>
<tr>
<td>San Salvador</td>
<td>0.307+</td>
<td>(0.173)</td>
</tr>
</tbody>
</table>


+p<0.1; *p<0.05; **p<0.01; ***p<0.001. Standard errors in parenthesis. Two-level ordered logistic multilevel model with random intercepts at the neighborhood level. The slopes associated with the variables on the first tercile of wealth and perceptions of government performance in the provision of services are allowed to vary randomly across neighborhoods.

Figures 3 illustrates the results from Model 3 more clearly. The predicted values we observe are consistent with our second hypothesis: the predicted probability of trusting the local government “a lot” only increases among individuals in the first tercile of wealth as perceptions of government performance improve when neighborhood inequality is relatively low (see Panel A in Figure 3). By contrast, in the most unequal neighborhoods, favorable perceptions of
government performance do not increase trust among the poor. In Panel B of Figure 3, we see a very different pattern. For residents at medium and high terciles of wealth (i.e., terciles 2 and 3), the predicted probability of trusting the local government “a lot” increases as perceptions of local government performance improve across all levels of neighborhood inequality. In other words, among the relatively affluent, trust in local government is much less dependent on neighborhood inequality and much more a function of perceptions of government performance in service provision. These patterns are also consistent with the expectations illustrated in Figure 1.
Figure 3

Panel A

Individuals in the First Tercile of Wealth

"Would you say that the services the municipal government is providing to the people are…?"

Very Bad  Bad  Neither Good  Nor Bad  Good  Very Good

Panel B

Individuals in the Second and Third Terciles of Wealth

"Would you say that the services the municipal government is providing to the people are…?"

Very Bad  Bad  Neither Good  Nor Bad  Good  Very Good
The statistical significance of this contrast between residents at different levels of personal wealth is more clearly illustrated in Figure 4, where the analysis is restricted to individuals who perceive that the local government is providing “very good” services. As shown in Panel A of Figure 4, the contrast in the reactions of poor (lowest tercile) and affluent (middle and high terciles) individuals who rate local government performance as very good is dramatic as neighborhood inequality increases. As expected, the average level of trust in local government is the highest when citizens perceive good performance and live in neighborhoods with the lowest level of neighborhood inequality. Among the poor, those high rates of trust quickly evaporate as inequality increases. At the highest level of neighborhood inequality, the difference in the predicted probability of trusting the local government “a lot” between residents in the lowest and highest terciles of wealth is about 20 percentage points (see Figure 4 Panel B). Indeed, we find that the difference in the mean predicted probability of trust in local government between the two groups is statistically significant when the Mackenzie index is equal to or higher than one (the number representing the national average). See Figure 4 Panel B.

Interestingly, as we look back to the differences between the poor and the affluent in neighborhoods with low inequality in Figure 4, we also find that poor respondents who perceive that government performance is very good are significantly more likely to trust the local government “a lot” than affluent respondents. We find that this is the case in the five neighborhoods with the lowest level of inequality in our sample.76 Taken together, these results reinforce our argument that the poor are particularly attentive to neighborhood inequality, and that the cost of inequality is substantial for the local government in terms of eroding citizen trust among the poor.

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76 Thus, this result is not driven by the neighborhood in our sample with the lowest level of inequality, but there are five neighborhoods with low inequality that show a similar trend (see Figure A2 in the online appendix).
Figure 4

Panel A
Individuals Perceiving a "Very Good" Service Provision

Panel B
Individuals Perceiving a "Very Good" Service Provision
(Difference in Mean Predicted Probability between Terciles of Wealth with 95% CI)
The weak association between perceptions of performance and trust in local government among the poor at high levels of neighborhood inequality demonstrates that these variables tap distinct concepts and thus are not tautological. Moreover, this result suggests that when perceptions of performance and trust in government are correlated (i.e., at low levels of inequality), the causal arrow runs from perceptions of performance to trust. Indeed, the fact that, at high levels of neighborhood inequality, trust in local government remains low among the poor despite perceptions of high performance suggests that inequality depresses the causal effect of perceptions of high performance on trust and not the other way around. Indeed, the opposite causal story makes no sense in this case: high inequality cannot possibly attenuate the impact of low trust on perceptions of high performance. Taken together, these results give us confidence that our findings are not an artifact of an endogeneity problem between perceptions of government performance and trust in local government.

Notably, the results we report in Tables 1 and 2 are robust to the inclusion of a half-dozen additional neighborhood-level characteristics: observed physical disorder, neighborhood size, participation rates in neighborhood associations or meetings convened by the local government, the extent of social cohesiveness in the neighborhood, and the percentage of neighborhood residents who voted for the incumbent political party in the municipal election carried out prior to the study.\(^7\) The consistency of our results after the inclusion of rigorous controls gives us confidence that our findings are reliable.

\(^7\) To avoid multicolinearity, we evaluated the effect of neighborhood inequality vis-à-vis each of these six variables in separate models while simultaneously controlling for absolute living standards and crime in the neighborhood. We report the results of this analysis in Tables A10-A21 in the online appendix. Because El Salvador is a highly ethnically homogenous country, ethnic heterogeneity is also held constant in our analysis.
Discussion and Conclusion

The results of our empirical analysis have important theoretical and policy implications. First, our research demonstrates that contextual factors associated with living conditions in one’s neighborhood substantively shape trust in local government. In particular, economic inequality within neighborhoods erodes trust in local government among the poor. This finding is consistent with Fairness Heuristic Theory’s prediction that individuals draw on information about distributive fairness within their social context as a heuristic to determine how much they can trust an authority. While indicators of procedural fairness such as experience with corruption lower trust in local government, perceptions of local government’s distributive fairness derived from neighborhood inequality exert a particularly strong negative effect on poor respondents’ level of trust in local government. Second, our research circumscribes one of the most consistent findings of individual-level studies of the origins of political trust—that people are more likely to trust their government if they perceive it is performing well and thus “delivering the goods.” We find that for the poor who live in a context of high neighborhood inequality, subjective evaluations of good local government performance are insufficient to increase political trust, which leads us to conclude that the poor value both performance and equity from their local government.

Taken together, our findings indicate that high economic inequality in the developing world poses a challenge for local governance when it is reflected at the neighborhood level. While decentralization reforms have increased the importance of the neighborhood as a social space for “bringing the state closer to the people” by encouraging citizen participation in neighborhood organizations, this form of direct democracy will not automatically lead to greater political trust if economic inequality in the region remains significantly high. Given the theorized
importance of political trust for citizens’ respect for the rule of law, widespread compliance with local governments’ laws and regulations will be difficult to achieve given the high levels of economic inequality in Latin American countries.

The drastic shift from a statist to a neoliberal economic model through “shock therapy” (i.e., the rapid adoption of free market policies) resulted in an increase in economic inequality toward the end of the 1980’s. In more recent years, a decline in economic inequality has been registered in many countries in the region, which is largely attributed to the more progressive nature of policies implemented by leftist governments. The current economic trends in the region, however, cast doubt about the sustainability of these redistributive policies, and even with the registered decline in economic inequality over the last few years, the region as a whole still holds the title as the most unequal in the world. Our estimates of neighborhood inequality indicate that the high overall economic inequality figures reported at the national level are largely reflected by deep inequalities that surface at the sub-municipal level within neighborhoods.

Although often overlooked, we find that neighborhood inequality undermines local governance in the current era of decentralization. The confluent trend of providing opportunities for citizen participation through neighborhood associations and promising equity in the distribution of local government resources have arguably made the poor particularly attentive to local government’s distributive fairness in their assessments of local government’s trustworthiness. Our evidence from El Salvador is consistent with the claim that neighborhood

78 Lustig 1995.
79 Huber and Stephens 2012.
inequality produces a reservoir of distrust in the local government among the poor. The policy implication of our findings is clear: fulfilling decentralization’s dual goal of improving equality and performance will not only result in better development outcomes for all but also in greater trust toward local governments.

To this point, however, the available evidence shows that decentralization outcomes related to performance and equity have been mixed in Latin America. For example, qualitative evidence for Chile suggests that after that country’s transition to democracy “efficiency and equity did not emerge in large scale” in the areas of primary health care and primary and secondary education, and, even where citizen participation actually had the potential to bring about improved services and equity, local governments often lacked the resources to respond to citizens’ demands.81 Evidence for Mexico leads to a similar conclusion: the impact of decentralization on the provision of water did not lead to uniform effects on performance and equity.82 More recently, based on evidence from Brazil and its efforts to decentralize primary education, Machado concludes that in municipalities with high economic inequality (and presumably in the most unequal neighborhoods in those municipalities) the promises of decentralization in terms of performance and equality were more difficult to fulfill due to political capture by local elites.83

This evidence gives support to initial fears by critics of the decentralization movement who cautioned against overly idyllic visions of decentralized power with the argument that certain societal contexts would constrain the realization of these expectations. The foremost

81 Kubal 2006.
82 Wilder and Romero 2006.
83 Machado 2013.
concern was that economic inequality has the potential to lead to starker political inequities because, in the context of economic inequality, “it may be easy for the local overlords to capture the local community institutions and the poor may be left grievously exposed to their mercies and their malfeasance.” 84 Thus, for these critics, rather than ameliorate inequities and concerns with service quality, decentralization also had the potential to further entrench already powerful factions or traditional elites and consequently reinforce historical patterns of exclusion.

The question then is how to enact policies that allow local governments to fulfill their promise of better and more equitable policy outcomes. Part of the solution may emerge from the experiences that some municipal governments in Latin American countries have recently had with progressive policies, like Conditional Cash Transfer (CCT) programs. 85 In general, these programs offer cash benefits to poor households with the objective of incentivizing household investment in nutrition and human capital development; thus, by design the programs aim to provide both short and long-term solutions to poverty and inequality. Nevertheless, to foster perceptions of government legitimacy, our results suggest that CCT programs will need to be complemented by parallel efforts to close the gap in standards of living not only across municipalities but also within sub-municipal units, including neighborhoods. CCT programs, have mainly focused their household targeting criteria on proxy-means tests that account for standard monetary measures of poverty like household wealth or per capita income and thus their procedures for the identification of beneficiaries are not based on a “multidimensional targeting” strategy that recognizes the complex determinants of poverty and inequality. 86 CCT programs alone will not maximize the relative well-being of the poor, and subsequently their trust in local

84 Bardhan 1996, 1355.
85 Adato and Hoddinott 2010.
86 Azevedo and Robles 2013.
government, without complementary public investments that more directly address structural factors that perpetuate economic inequality.

Without the political will to value and address structural aspects of deep socioeconomic disparities within municipalities, inequality will continue to plague Latin American societies and deter political trust. Although it might be possible for local political elites to repeatedly achieve reelection without addressing questions of inequality, economic disparities will weigh on and hold back the developmental prospects for the whole society in part because long-term political stability will always be in question as long as a significant group of disenchanted and economically marginalized citizens remains. In the end we can only reiterate the refrain of our argument: it is not enough to just “deliver the goods.” Without achieving greater equity through government policy efforts, many citizens will be unlikely to gain sufficient confidence in their governing institutions to ensure democratic stability.

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