The Determinants of Community Generosity

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Abstract

This paper develops and tests a model of the determinants of community generosity. Drawing upon theories from sociology, political science and economics, I test the interactions between community diversity and human capital, government institutions and the legitimacy of the marketplace. Drawing upon measures of community cohesion and local institutional development, I test the determinants of multiple measures of community generosity using a panel dataset of US counties. This paper has important implications for nonprofit theory as well as public policy that seek private solutions to local issues.

Introduction

Over the last fifty years, ongoing trends of government restructuring through devolution and privatization have pushed local governments to seek community solutions to increasingly complex social problems. However, uneven levels of civic participation, uneven distribution of community resources, and differing degrees of willingness to redistribute resources across communities may create gaps in collective capacity across communities. One of the early studies of the nonprofit sector, asked this basic question: Why are some communities more generous and better able to raise private resources to respond to the collective needs of their residents (Wolpert, 1988) ? Drawing upon an ever-growing body of research that explores the determinants of individual giving and volunteering (Bekkers & Wiepking, 2010)or even the community determinants of the size of the nonprofit sector (Lecy & Van Slyke, 2012), an easy answer might be that some communities are well endowed with the resources necessary to support collective activity. However, neither the determinants of individual philanthropy nor the determinants of the size of the nonprofit sector may adequately explain differing levels of "community philanthropy." While philanthropic giving is often an expression of private or common interests (Lohmann, 1992), giving in response to collective needsrepresents the collective interests of a broader geographic community and the drivers of such place based collective action may be unique. Place has distinctive patterns of generosity that cannot be explained by traditional indicators of individual generosity (Wolpert, 1989).

Drawing upon theories from sociology, political science and economics that explain social

capital and various dimensions of civic participation, this paper explores three questions: 1). How does community diversity effect nonprofit contributions? Do diverse communities experience lower levels of contributions to collective needs than less diverse communities do? 2). Does community diversity moderate the relationship between the supply of socio-demographic and institutional resources and giving? 3). Have the effect of community diversity changed over time? I posit that the ability to mobilize resources rather than the levels of resources drives levels of community generosity (willingness to give locally in response to collective needs). The interaction between **community cohesion** (Portes & Vickstrom, 2011; Fieldhouse, E., & Cutts, 2010) and local capacity, particularly **human capital, government institutions** (Salamon, & Sokolowski, 2003), and the **legitimacy of the philanthropic marketplace** (Paarlberg & Meinhold, 2012) are predictors of community generosity.

I test this model in the context of community generosity in United States counties. I measure community generosity using two variables: contributions to organizations operating providing poverty services and contributions to arts and education organizations. The first measure represents giving in response to collective needs, which generally does not benefit the donor, and the latter represents giving for often private benefit. . The use of multiple dependent variables tests the generalizability of the model. I use a Blinder-Oaxaca decomposition to test how the determinants of contributions differ between highly diverse and less diverse communities and whether these differences vary across time. .

This research advances our conceptual understanding of the determinants of community philanthropy and the policy implications of the determinants of such collective giving. This paper seeks to develop and test a more comprehensive conceptual model of community philanthropy. From a policy standpoint, there is a global trend for public policies to encourage

local solutions to local issues. However, concern exists about the unequal capacity of communities. Often those communities most in need of private philanthropic leadership may be least likely to support philanthropic action. This research seeks to uncover some of the determinants of these disparities and explore the consequences for public policies that promote local action.

The Determinants of Community Generosity

Community generosity is private voluntary giving that "…raises resources from a community to support local nonprofit and government services that benefit the general community (Wolpert, 1988). Giving may be in response to the collective needs of the community to issues or causes that generally do not benefit the donor, such as the provision of social services to those that cannot afford services. Alternatively, giving may support the private interests of the donor through gifts that largely benefit the donors' interests, such as arts or education. Ultimately, community philanthropy is a place-based expression of general civic responsibility, representing the collective versus common or private interests of donors.

Because of the placed based and collective characteristics of community generosity, the factors that determine the number of nonprofits may not predict levels of community generosity. For example, wealth is associated with increased philanthropy. However, wealthy donors may not give to their "local" communities. A quick look at the Philanthropy 100 confirms that philanthropic capital is mobile and many large gifts do not stay in the donor's community. Wealthy donors may give to elite national or international organizations or even through donor

advised funds, which are neither place bound nor responsive to collective needs. Furthermore, while the size of the nonprofit sector may be driven by forces outside of the community (such as federal and state funding), community philanthropy is inherently driven by local resources and the willingness of local residents to contribute resources for collective needs. Finally, while population diversity may lead to an increased number of organizations in a community; generosity may be mobilized by community cohesion (Paarlberg & Gen, 2009).

Drawing upon literature across a variety of disciplines, I posit that access to various community resources in the presence of high levels of community cohesion may drive community philanthropy. However, as Wolpert (1988) notes variation in generosity across cities is not merely a function of diverse tastes and preferences but emerges from institutions and cultural patterns that persist across regions and cities. In the following section, I briefly review supply side determinants of nonprofit activity.

Community Resources

A growing body of research identifies community socio-economic and institutional resources associated with the both individual philanthropy and the size and scope of the nonprofit sector and philanthropic activity. Resources available in the community drive the prevalence of nonprofit organizations, the size and health of the sector (Grønbjerg and Paarlberg 200l; Lecy and Van Slyke 2013; Paarlberg and Gen 2009; Saxton and Benson, 2005), philanthropic giving (Bekkers and Wiepking, 2007) and civic activity (Wilson, 2012).

Education: As Helliwell and Putnam (2007) observe, "Education is one of the most important predictors—usually in fact the most important predictor—of many forms of political and social engagement." (p. 1) Education promotes the skills, knowledge, connections, and civic values

necessary for civic engagement (Bekkers and Wiepking, 2007; Helliwell and Putnam, 2007; Wilson, 2012). Brown (2001) posits, "By enhancing the individual's understanding of and status in the world, education engages persons in a larger world, and that engagement brings a willingness to undertake actions for the collective good, including personal philanthropy" (p. 1).

At the individual level, education is positively associated with various forms of civic engagement (Helliwell and Putnam 2007), giving (Bekkers & Wiepking, 2007) and volunteering (Wilson, 2012). Education also has positive externalities. Community levels of education are also positively associated with various forms of civic engagement (Helliwell and Putnam, 2007) and the density of nonprofits (Gronbjerg & Paarlberg, 2001).

Financial Resources: Income & Wealth: Similar to education, financial resources provide the prerequisite ability, connections and tastes/preferences that drive civic engagement. Financial resources are associated with various indicators of individual philanthropic behavior. Personal income is positively associated with donations (Bekkers and Wiepking, 2007) and volunteering (Wilson, 2012), particularly in the US. There is some mixed evidence that the relationship between income and proportion of income donated is curvilinear. Individual wealth may also enable one to be more philanthropic in their community. Wealth and perceived financial position are positively associated with donations (Bekkers and Wiepking, 2007; Havens, et al , 2007) and Rotolo, Wilson and Hughes (2010) find that homeowners (one indicator of wealth) participate more in politics and join more voluntary associations.

The relationship between community measures of income and wealth are mixed. Gittell and Tebaldi (2006) analysis of tax itemized deductions in US states find that personal income is a key factor associated with itemized deductions. The y find that a 10% increase in average

personal income increases average giving per tax filer by about 8%. They also find that wealth (capital gains) increases average giving. However, community income does not necessarily lead to higher levels of community philanthropy. Scholars posit that higher income communities may be more likely to support for-profit providers or less willing to support income redistribution through the nonprofit sector (Matsunaga & Yamauchi 2004). Several studies find that that various measures of community finances dampen both individual and community-level indicators of civic engagement. For example, community per capita income is associated with a lower probability that a person will make a donation (Bielefeld, Rooney and Steinberg) or volunteer (Lim and Macgregor 2012). Higher income communities are also associated with decreased community levels of giving to federated charities (Wolpert, 1988) and the density of nonprofit organizations (Matsunaga & Yamauchi 2004). Community resources may not necessarily reflect a community's capacity to be philanthropic, but their preferences for goods/services. For example, Bielefeld (2000) finds that community wealth is associated with more education and arts providers.

Institutional Resources

Institutional theory assumes that human behavior and behavior within communities is regulated by formal (government, organizations) and informal rules and norms. Collective action (philanthropy) is determined not only by the socio-demographic characteristics of individuals within the community, but also by "institutional environment." Institutions reinforce agreements and civic norms (Knack and Keefer 1997). Government institutions in particular provide the infrastructure and resources necessary for civic action (Salamon et al 2000; Skocpol, Ganz, & Munson, Z. 2000).

An institutional approach has been applied to study of volunteering (Rotoloa and Wilson, 2014; Salamon and Sokolowski, 2003) and giving (Beielefed. Rooney, Steinberg, 2005); however, the results are mixed. Salamon et al (2000) posits interdependence between sectors and finds a positive relationship between government social spending and volunteerism (using 22 cross-country data set). Similarly, Wolpert (1988) finds positive associations between levels of state and local expenditures for dependent populations and local donor support for community amenities Others have found evidence of government spending crowding out voluntary activity. Bielefeld, Steinberg, Rooney (2005) find that per capita total state expenditures is associated with lower probability of an individual making a donation to nonreligious causes. Stadelman-Steffen (2011) find a strong negative correlation between welfare state expenditures and social volunteering. In the US, Matsunaga and Yamauchi (2004) also find a negative relationship between government expenditures and density of nonprofit sector—a 1% decrease in gov. expenditures is associated with a .22% increase in size of the nonprofit sector.

SSocial institutions also affect the development of civic activity. Wolpert (1988) posits a well-established nonprofit sector pre-dating government service provision is evidence of a local elite and middle class donors that support **civic** obligation [Wolpert, 1988]. The presence of established organizations reflects the socialization of elites to support and sustain civic activity. Volunteering is strongest where there is infrastructure to support it (Rotolo and Wilson, 2011).

Community Cohesion

Government failure theory, a dominant framework in nonprofit literature, posits a demand size perspective on nonprofit activity. In diverse societies, heterogeneous preferences for

public goods will go unmet by generic public services (Matsunaga and Yamauchi, 2004). Nonprofits will arise in response to diverse preferences and we would therefore expect that as diversity increases size of the nonprofit sector increases. As Lecy and Van Slyke posit, "demand heterogeneity" might induce private donations. However, there is only limited empirical support for a positive relationship between diversity and the size of the nonprofit sector (Lecy and Van Slyke, 2013). Gronbjerg and Paarlberg (2001) find a negative relationship between religious diversity and the density of both advocacy and mutual benefit organizations. Instead, resources favoring the formation and maintenance of nonprofits are more likely to be obtained in communities, which are socially cohesive or have a common bond based on shared values (Matsunaga and Yamauchi, 2004; Paarlberg and Gen, 2009).

One of the core questions of social science is the degree to which social differences affect various dimensions of social structure and behavior, including social trust and civic participation (Rotolo & Wilson, 2014). Knack and Keefer (1997) posit that in diverse societies homogeneous associations form to meet the needs of particular groups, strengthening trust within groups, but not across groups. Putnam (2007) argues that although societal diversity is beneficial for the long-term health of a society, population diversity dampens levels of social capital. Conflict theory or group threat theories (Putnam, 2007, pp. 141-142) suggest that in diverse groups, greater conflict over resources leads majority group members to feel threatened, leading to intolerance, distrust of outsiders and intolerance (Fieldhouse & Cutts, 2010). Similarly, minority groups may fear discrimination (Coffe, 2007). The concept of social homophily (McPherson, Smith-Lovin and Cook, 2001) —the tendency of individuals to congregate with others of similar backgrounds—suggests that diverse communities have fewer connections between individuals because individuals inherently seek ties with similar individuals. In

contrast, in diverse communities, "…there are fewer people with whom one can identify, resulting in fewer social connections and lower levels of trust" (Lancee and Dronkers, p. 600). Finally, diverse individuals are less likely to share values and norms, making it more difficult for communities to agree upon priorities, apply peer pressure to push self-investment in public service delivery, and trust that their resources will be used appropriately (Alesina, Baqir and Easterly,1999; Coffé 2009; Costa and Kahn, 2003; Miguel and Gugerty, 2005; Putnam, 2007). From an economic perspective, Alesina, Baqir and Easterly (1999) propose that "ethnic group's utility level for a given public good is reduced if other groups also use it" (p. 1244). In communities with high levels of diversity, people will experience problems cooperating with each other and are less likel to share common values and norms; feel less solidarity with the community and less motivated to cooperate to create public goods (Rotolo and Wilson, 2014). In diverse communities, energy and resources may be diverted to the pursuit of "private goods" rather than public goods. For example, diversity may mobilize political activity because more is at stake (Fieldhouse and Cutts, 2010).

These findings are confirmed across a variety of forms of "collective action." Heterogeneity is negatively associated with secular volunteer rates (Costa and Kahn, 2003; Rotolo and Wilson 2014), organizational membership (Costa and Kahn, 2003) and lower levels of investment in public goods (Alesina, Baqir and Easterly, 1999; Goldin and Katz, 1999; Luttmer, 2001; Miguel and Gugerty, 2005; Porterba, 1997). Bringing together concepts of social cohesion and "public goods," Paarlberg and Gen (2009) find that although racial diversity is associated with the formation of PTAs (private groups to support public education, diversity is negatively associated with the level of resources raised by PTAs.

Although there is strong evidence to support the negative relationship between diversity and a variety of measures of social capital and collective action, Portes and Vickstrom's (2011) comprehensive review of existing research leads to a more nuanced understanding of this relationship. They conclude that subsequent research finds weak relationship between social capital and diversity and that this relationship is contingent on various individual and contextual factors. For example, the effect of community diversity appears to be different in minority and majority members of diverse communities (Stolle et al, 2008). Also, segregation and diversity are not the same thing and Uslaner (2010) finds that individuals living in diverse, yet integrated communities, are more likely to trust others. Several studies from the UK show some support for the negative consequences of diversity, but also demonstrate the importance of taking material deprivation and social interaction into account (Letki, 2008; Laurence, 2011; Sturgis & Smith, 2010). Diversity accounts for a very small percentage of the variation in levels of social capital and that income and education are more important predictors (Fieldhouse & Cutts 2010; Tolsma 2009). Portes and Vickstrom (2011) conclude by suggesting that it is not diversity, but unequal diversity that drives stocks of social capital.

Income inequality may increase social disparities and class polarization (Knack and Keefer, and decrease trust (Kawachi et al, 1997; Knack and Keefer 1997). Higher economic inequality is related to lower levels of volunteering, giving and organizational memberships (Borgonovi, 2008; Costa and Kahn, 2003; Knack and Keefer 1997; Uslaner and Brown, 2005).

Methods

To test the relationship between community resources, diversity and contributions, I use a Blinder-Oaxaca decomposition.

Variables and Data

I test this model in the context of the United States counties at three points in time: 1992, 2002, and 2012. We draw our data from a variety of sources including nonprofit data from the National Center for Charitable Statistics and US Census data. Table 1 summarizes our construction of variables. Table 2 describes summary statistics.

--Table 1 and Table 2 about here. --

Dependent Variables

I compare the effect of diversity on contributions using two dependent variables – contributions to anti-poverty nonprofits and contributions to arts and education organizations. Contributions to anti-poverty nonprofits are a form of community generosity, whereby the donor is making a gift to benefit the larger community and generally does not benefit from their donation (Wolpert 1988). In contrast, arts and education organizations often provide a private good that benefits the donor (or the donor has benefited from the services in the past) (Beilefeld, Roony & Steinberg 2005; Wolpert 1989). Data for our dependent variables comes from the National Center for Charitable Statistics (NCCS). NCCS provides the self-reported financial data from nonprofit organizations registered with the IRS that are required to file a report with the IRS. Although contributions include gifts from individuals, foundations and grants from government, most contributions come from locals and in the United States individuals are the largest source of donations. Antipoverty nonprofits are those organizations whose NTEECC code

generally classifies them as providing services to the "poor"[1]. To create a local measure of contributions, we exclude those organizations that are "central organizations," that report the finances of affiliated and subsidiary organizations. We then aggregate total contributions and control for the demand for services by creating per capita measures. In the case of antipoverty nonprofits, we divide total contributions by number of families in poverty. We divide contributions to arts and education organizations by total population of each county. Per capita contributions to antipoverty organizations increased from $2551 in 1992 to $4085 in 2012. Contributions to arts and education organizations increased from $66.50 in 1992 to $131.97 in 2012.

Independent Variables

I include three measures of socio-economic resources (education, income and wealth), two measures of institutional resources (local government revenues and the age of the nonprofit sector) and three measures of community diversity (racial diversity, income inequality and segregation). Education is the percent of population over 25 years of age with a bachelor's degree. The percent of population with at least a bachelors increased from 13.5 percent in 1992 to 18.67 percent in 2012. Income is median household income for each county. Median household income increased from $39,000 in 1992 to $44,000 in 2002, but declined in 2012 to $42,000, reflecting the long term global economic downturn. While education and income are common measures of socio-demographic, studies of nonprofit activity rarely distinguish between wealth and income (as an example see Lecy and Van Slyke, 2013). However, wealth, distinct from current resources, provides a sense of financial security and long-term commitment to the

community, that may be associated with higher levels of philanthropy and civic engagement (Bekkers and Wiepking, 2010; Rotolo, Wilson, and Hughes, 2010; Schervish 2014). We measure wealth as median home value, the largest component of wealth for the typical American household (Herbert, McCue and Sanchez-Moyano 2013. The value of one's home is a key economic asset, source of credit and source of wealth passed from one generation to the next (Rotolo, Wilson, and Hughes, 2010). Median home value increased from $89,800 in 1992 to $128,000 in 2012. We measure the size of local government as total revenues per capita. Total revenues include both local sources of revenue, such as property and sales tax, and inter-governmental transfers. Local government revenues increased from $3.22 per capital in 1992 to $4.16 per capita in 2012. I account for the institutionalized nature of the nonprofit sector by calculating the percent of organizations in each county that were established before 1960. Reflecting the growth in the number of nonprofit organizations over the last two decades, the percent of organizations that were registered with the IRS prior to 1960 increased steadily decreased from 11.47 percent in 1992 to 4.52 percent in 2012.

Finally, consistent with other recent studies that find that multiple forms of social cohesion, not just racial diversity, affect collective action, I include three measures of diversity. First, the Gini-Simpson index measures racial diversity. The index is equal to one minus the sum of the squared proportion of each type of racial group. As the index approaches one, population diversity increases, with the chance of two individuals being from the same racial group decreasing.The GINI index steadily increased from 1992 to 2012. Second, I include a measure of racial segregation, the index of dissimilarity. This measure captures the segregation of blacks from whites in a county and measures the evenness with which the two groups are distributed

across a geographic region. A high score reflects high levels of segregations where a low score reflects low levels of segregation (a more integrated community). Since 1992, segregation has gradually decreased from .39 to .32. Third, we include a measure of income inequality (the Gini index). As the index approaches one, a community is approaching perfect inequality. Inequality has remained stable since 1992.

In all cases, our independent variables are lag variables, drawing upon data that is at least two years older than our dependent variables to account for possible endogeneity. For example, it might be possible that contributions to anti-poverty nonprofits reduce poverty and increase income in a community. Similarily, contributions to educational nonprofits might be associated with higher graduation rates. We adjust each financial variable for inflation and report in 2012 dollars.

Table 3 is the correlation matrix. Education, income, wealth are all strongly correlated with contributions to both anti-poverty organizations and arts and education organizations. Local government, philanthropic institutions, racial diversity and racial integration are weakly correlated with contributions. There is a negative correlation between income inequality and contributions to antipoverty organizations, while there is a weak positive correlation between income inequality and contributions to arts and education organizations.**Analysis**

The analysis proceeds in several steps. First, we conduct a panel regression, using both pooled panel regression and controlling for fixed effects of entity and time. Then we report the regression results from cross sectional regression analysis, clustering the standard errors on entity. Finally, I use a Blinder-Oaxaca decomposition to test for the differences across diverse and less diverse communities (see Jann, 2008). A Blinder-Oaxaca decomposition, often used to test for inequalities in health and income outcomes, explains the gap in the means of an outcome

variable (in this case contributions to nonprofit organizations) between two groups (in this case highly diverse communities and less diverse communities). The differences between the two groups are broken down into group differences in the magnitudes of determinants of contributions (socio-economic and institutional resources, what are often called endowments) and group differences in the effects of these determinants. In other words, if there are differences in mean contributions between highly diverse and less diverse communities, are those differences because diverse communities have lower stocks of the social and institutional endowments necessary to support philanthropic activity? Or are the differences due to the magnitude of the differing effect of the beta coefficients?The differences in the Beta coefficients are referred to the "unexplained variation." The Blinder-Oaxaca decomposition decomposes the gap in mean outcomes as a gap in endowments (E), a gap in coefficients (C), and a gap arising from the interaction between endowments and coefficients (CE). I explore how the gaps in contributions vary over three years (1992,2002 and 2012) and across antipoverty and arts and education organizations.

Results

Tables 4, 4a and 4b report the results of OLS regression of the determinants of contributions to antipoverty organizations. I split the models across time (Table 4) and across high diversity and low diversity communities (Tables 4a and 4b). The model explains between 24 and 34 of the variation in contributions to antipoverty and arts and education organizations, respectively. Several key findings emerge. First, community levels of education and wealth are generally associated with higher levels of contributions to both antipoverty and arts and

education organizations. These findings are generally consistent with supply side frameworks. However, it is interesting to note that while median household income is positively associated with contributions to antipoverty organizations in 1992 and 2002, median income is negatively associated with contributions to antipoverty organizations in 2012 and to arts and education organizations in 2002 and 2012. Similarly, the relationship between local government revenues and contributions is inconsistent. The effect of local government revenues on antipoverty organizations is only significant in 2012, when it is negative. However, in 2012, local government revenues are positively associated with contributions to arts and education organizations. The institutionalization of the nonprofit sector is positively associated with contributions to arts and education organizations in all years. This may reflect the stability of arts and education organizations, which are often place bound. Racial diversity is negatively associated with contributions to antipoverty organizations in 2012; however, racial diversity is positively associated with contributions to arts and education organizations in 2002 and 2012. As segregation increases, contributions to both antipoverty and arts and education organizations increases in all years. Income inequality is negatively associated with donations to arts and education organizations. The findings provide some support that social structure has a different effect on public goods (contributions to antipoverty nonprofits) and private goods (contributions to arts and education organizations).

--Table 4 about here--

Diversity and Contributions

To explore the effects of racial diversity on these variables, I then split the sample across high diversity communities (diversity levels greater than 1 standard deviation above the mean)

and less diverse communities (less than 1 standard deviation above the mean) and year. Table 4a provides the results of the determinants of contributions to antipoverty nonprofits. First, education, wealth, and segregation generally have a stronger effect on contributions to antipoverty organizations in communities that are more diverse. Income is positively associated with contributions to antipoverty organizations in less diverse communities (1992 and 2002) and negatively associated with contributions to antipoverty organizations in high diversity communities in 2012. The effects of income inequality are inconsistent.

Table 4b presents the results for contributions to arts and education organizations. Similar to contributions to antipoverty organizations, education and wealth are positively associated with contributions to arts and educations organizations and generally have a stronger effect on contributions in communities that are more diverse. Income is negatively related to contributions in both diverse and less diverse counties in 2002 and 2012. Similarly, segregation has a positive effect on contributions to arts and education organizations in all time periods in both diverse and less diverse counties. Income inequality is negatively associated with contributions to arts and education organizations in highly diverse communities in 2012 and the negative effect is stronger in 2002 in highly diverse communities.

Table 4a & Table 4b about here--

Decomposing the Contribution Gap

Table 5 reports the gaps in contributions to antipoverty organizations and arts/education organizations. Because the dependent variables are logged, the results are transformed to the exponential form. The geometric means of contributions to antipoverty organizations located in lower diversity counties increased from $210.54 in 1992 to $469.72 in 2012. The geometric

means of contributions to antipoverty organizations located in high diversity counties increased from $ 154.55 in 1992 to $ 400.390 in 2012. The difference in levels of contributions decreased from 36% in 1992 to 17% in 2012. By 2012, the gaps in contributions to antipoverty organizations were not statistically significant.

What explains these gaps? Are these differences the results of different community characteristics or due to unexplained differences in the beta coefficients across more and less diverse counties? Adjusting the endowment levels of high diversity communities to the levels of less diverse communities would increase contributions in diverse communities by 70%. In contrast, by 2012, the effect of community characteristics on contributions between diverse and less diverse counties had reduced. In 2012, only four percent of the gap is explained by the differing coefficients across diverse and less diverse counties. It is quite interesting to note that by 2012, differences in coefficients accounted for 44% of the gap between high and lower diversity communities. Adjusting the endowment levels of high diversity communities to the levels of less diverse communities would actually decrease contributions in diverse communities by 70%. However, if the effect of endowments (the beta coefficients) in diverse communities were the same as the effect of beta coefficients in non-diverse communities, we would expect a 43% increase in contributions to antipoverty organizations in diverse communities. In particular, by 2012, if highly diverse counties were to have the same socio-economic levels as less diverse counties, it would decrease contributions in high diversity counties by 17%.

In contrast, the gap in contributions to arts and education organizations between diverse and less diverse communities is increasing, with diverse communities having higher levels of contributions by 2012. The geometric means of contributions to arts/education organizations located in less diverse counties increased from $ 8.31 in 1992 to $23.83 in 2012. The geometric

means of contributions to arts/education organizations located in more diverse counties increased from $ 8.205 in 1992 to $ 32.41in 2012. While contributions to arts and culture organizations in more diverse counties were 1% less in 1992, in 2012, contributions to arts and education organizations were 36% greater than mean contributions to arts and education organizations in less diverse communities. This gap was largely due to community characteristics. Adjusting the characteristics of high diversity counties to the levels of less diverse counties would actually decrease contributions to arts/education organizations by 39%. In particular, adjusting the socio-economic characteristics of more diverse communities to resemble those of less diverse communities would reduce the level contributions by 19%.

Discussion

This paper offers several contributions to our understanding of the community determinants of generosity. First, our paper distinguishes between the determinants of contributions to support public and private goods. Second, our paper explores the gaps in contributions between highly diverse communities and less diverse communities. Third, our paper uses a statistical approach used in economics and sociology that may help nonprofit scholars explain differences in the size and scope of the nonprofit sector. Our paper both advances nonprofit theory and offers methodological advancements for nonprofit scholars.

Conceptually, our results suggest that county socio-economic characteristics (education, income and wealth) have a similar effect on contributions to both antipoverty and arts and education organizations. However, social structure diversity and income inequality have differing effects. While racial diversity has no or a negative effect (2012) on contributions to

antipoverty organizations, diversity has a positive effect on contributions to arts and culture organizations. Similarly, we find that while the predicted values for contributions to antipoverty nonprofits are lower in diverse communities, predicted values for contributions to antipoverty organizations are higher. These findings may suggest that government failure theory may be more effective in predicting the provision of private goods than in predicting public goods. Communities with diverse tastes and preferences satisfy their unmet demands for private goods through voluntary contributions. Theories of social cohesion may better explain a community's willingness to redistribute resources to support public and collective goods (the provision of antipoverty services). In diverse communities, individuals may be less likely to trust, associate and engage in civic affairs. They may also be less willing to redistribute resources to community members who are different from themselves. It is particularly important to explore how differing coefficients affect the gap in contributions. Socio-economic status appears to have less of an effect on contributions in highly diverse communities. If socio-economic status were to have the same effect on contributions in more diverse communities as they do in less diverse communities, contributions would increase significantly. As socio-economic status increases, more diverse communities may be less willing to contribute to both antipoverty and arts and education.

Finally, our analysis draws upon a methodological technique to explore gaps in the size and structure of the nonprofit sector. While scholars and policy makers are increasingly concerned about the uneven capacity of communities to respond to collective needs of their communities, this technique offers a statistical method to decompose the determinants of gaps across communities.

NOTES:

1. We use the NCCS NTEECC code (http://nccs.urban.org/classification/NTEE.cfm) to identify those organizations focused on poverty relief or education/arts organizations. Anti-poverty organizations includes NTEE codes: I80, I83, J20, J21, J22, J30, J32, J33, E31, K30, K31, K34, K35, L20, L21, L22, L30, L40, L41, L80, L81, L82, P20, P21, P24, P26–P33, P40, P42–P47, P50–P52, P60–P62, P70, P71, P73, P74, P75, P80, P82, and P84. (Silverman et al., *The Inland Empire Nonprofit Sector*). Arts and education organizations are those organizations broadly engaged in the arts/culture and education NTEE major groups.

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Table 1: Description of Variables		
Variable	Construct	Source of Data
Dependent Variables		
Contributions_antipoverty[1]	Total contributions to antipoverty nonprofits/# families in poverty	Contributions: NCCS Core Files (1992, 2002, 2012) Poverty: # families below poverty (Census)
Contributions_artsed[1]	Total contributions to arts and education nonprofits/# total population	NCCS Core Files (1992, 2002, 2012) Population (Census)
Independent Variables		
Socio-economic resources		
Education	Percent of population (25 years and older) with a bachelor's degree (1990,2000, 2009)	Census
Income ($ 10K) [1]	Median household Income (1989, 1999, 2009)	Census
Wealth ($ 10K) [1]	Median value of owner-occupied housing units (1990, 2000, 2009)	Census
Institutional resources		
Local government [1]	Total local government revenue/population (1987,1997, 2007)	Census of Governments
Philanthropic Institutions	Percent of all nonprofits established before 1960	NCCS Core Files (1992, 2002, 2012)
Community Diversity		
Racial diversity	1-Σ(racialgroup/total population)^2	US Census (1990, 2000, 2010)
Racial integration	Index of dissimilarity: Evenness with which two groups are distributed across county	University of Michigan, Population Studies Center, Racial Residential Segregation Measurement Project http://enceladus.isr.umich.edu/race/calculate.html (1990,2000,2010)
Income inequality	Gini-Index	Arizona State University
[1] adjusted for inflation and reported as 2012 dollars.		

Table 2: Descriptive Statistics

	All years		1992	2002	2012
	Mean	Std. Dev.			
Dependent Variables					
Contributions_antipoverty[1]	$ 3,531.82	$ 8,932.31	$ 2,551.47	$ 3,911.85	$ 4,085.43
Contributions_antipoverty[1 (ln)]	5.70	3.32	5.16	5.83	6.09
Contributions_artsed[1]	$ 107.42	$ 396.42	$ 66.50	$ 120.40	$ 131.97
Contributions_artsed[1 (ln)]	2.78	2.07	2.09	2.95	3.23
Independent Variables					
Education	16.22	7.96	13.48	16.51	18.67
Income ($10k)	$ 4.25	$ 1.12	$ 3.99	$ 4.48	$ 4.28
Wealth ($10k)	$ 10.84	$ 7.08	$ 8.98	$ 10.71	$ 12.84
Local government [1]	$ 3.72	$ 1.70	$ 3.22	$ 3.77	$ 4.16
Philanthropic Institutions	7.42	11.18	11.47	6.47	4.52
Racial diversity	0.24	0.18	0.20	0.25	0.28
Racial segregation	0.36	0.18	0.39	0.35	0.32
Income inequality	0.43	0.04	0.42	0.43	0.43

[1] adjusted for inflation and reported as 2012 dollars.

Table 3: Correlation Matrix

		1	2	3	4	5	6	7	8	9	10
1	Contributions_antipoverty (ln)	1									
2	Contributions_artsed (ln)	0.4516*	1								
3	Education	0.4194*	0.5329*	1							
4	Income ($10k)	0.3703*	0.3100*	0.6588*	1						
5	Wealth ($10k)	0.3689*	0.3853*	0.6909*	0.6922*	1					
6	Local government	0.0876*	0.1620*	0.2820*	0.2056*	0.2830*	1				
7	Philanthropic Institutions	0.0631*			-0.0516*	-0.0500*	-0.0500*	1			
8	Racial diversity	0.0719*	0.1566*	0.1524*		0.1874*	0.1148*	-0.1089*	1		
9	Racial segregation	0.2863*	0.1888*	0.0687*	0.1193*	0.0957*	-0.0698*	0.1308*		1	
10	Income inequality	-0.0477*	0.0696*		-0.4621*	-0.0787*		-0.0580*	0.3880*		1

Table 4: OLS Regression: Contributions

VARIABLES	(1) PV:1992	(2) PV:2002	(3) PV:2012	(4) AE: 1992	(5) AE: 2002	(6) AE:2012
Education	0.138***	0.112***	0.122***	0.129***	0.149***	0.139***
	(0.0124)	(0.0105)	(0.00950)	(0.00728)	(0.00621)	(0.00565)
Income	0.520***	0.204**	-0.141*	-0.0294	-0.521***	-0.448***
	(0.119)	(0.104)	(0.0841)	(0.0698)	(0.0613)	(0.0500)
Wealth	0.0116	0.0647***	0.0533***	0.0211*	0.0479***	0.0211***
	(0.0184)	(0.0161)	(0.00888)	(0.0108)	(0.00948)	(0.00527)
Local government	0.0180	-0.0145	-0.0472*	-0.0437*	0.0128	0.0294*
	(0.0449)	(0.0385)	(0.0256)	(0.0263)	(0.0227)	(0.0153)
Philanthropic institutions	0.00103	0.00936	-0.0100	0.0196***	0.0198***	0.0123***
	(0.00395)	(0.00611)	(0.00708)	(0.00232)	(0.00360)	(0.00421)
Racial diversity	0.244	-0.250	-0.882***	0.319	0.857***	0.445**
	(0.371)	(0.328)	(0.292)	(0.217)	(0.193)	(0.173)
Segregation	4.143***	5.044***	5.404***	1.720***	2.339***	2.158***
	(0.327)	(0.307)	(0.293)	(0.192)	(0.181)	(0.174)
Income inequality	1.075	-1.886	-2.938	1.221	-6.120***	-2.176**
	(2.461)	(2.230)	(1.803)	(1.443)	(1.315)	(1.070)
Constant	-1.081	1.488	3.760***	-1.079	3.773***	2.234***
	(1.274)	(1.194)	(0.902)	(0.747)	(0.704)	(0.535)
Observations	2,710	2,961	3,035	2,710	2,961	3,037
R-squared	0.247	0.268	0.273	0.275	0.335	0.343

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Source:detsp_oaxaca_log_4

Table 4a: OLS Regression: AntiPoverty Contributions

VARIABLES	(1) LD:1992	(2) HD:1992	(3) LD:2002	(4) HD:2002	(5) LD:2012	(6) HD:2012
Education	0.122***	0.163***	0.108***	0.118***	0.118***	0.123***
	(0.0145)	(0.0233)	(0.0125)	(0.0205)	(0.0114)	(0.0177)
Income	0.653***	0.0620	0.257**	-0.0478	-0.0960	-0.336**
	(0.137)	(0.231)	(0.119)	(0.208)	(0.0976)	(0.164)
Wealth	0.0253	-0.000791	0.0763***	0.0538*	0.0579***	0.0566***
	(0.0233)	(0.0295)	(0.0190)	(0.0304)	(0.0113)	(0.0145)
Local government	0.0519	-0.0550	-0.0387	0.0531	-0.0207	-0.0767*
	(0.0514)	(0.0905)	(0.0458)	(0.0720)	(0.0342)	(0.0391)
Philanthropic institutions	0.000663	-0.00506	0.0171**	-0.0129	-0.000296	-0.0274**
	(0.00443)	(0.00780)	(0.00711)	(0.0121)	(0.00859)	(0.0124)
Segregation	3.748***	5.857***	4.958***	5.527***	5.354***	5.569***
	(0.387)	(0.607)	(0.359)	(0.647)	(0.337)	(0.619)
Income inequality	4.993*	-6.935*	-1.945	-3.775	-3.649*	-1.776
	(2.832)	(4.074)	(2.582)	(4.011)	(2.057)	(3.492)
Constant	-3.046**	3.775*	1.218	3.068	3.591***	3.588**
	(1.480)	(2.263)	(1.406)	(2.226)	(1.053)	(1.787)
Observations	2,080	731	2,247	714	2,315	720
R-squared	0.225	0.325	0.253	0.328	0.243	0.370

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4b: OLS Regression: Arts/Ed Contributions

VARIABLES	(1) LD:1992	(2) HD:1992	(3) LD:2002	(4) HD:2002	(5) LD:2012	(6) HD:2012
Education	0.121***	0.149***	0.148***	0.148***	0.140***	0.131***
	(0.00843)	(0.0149)	(0.00737)	(0.0122)	(0.00673)	(0.0107)
Income	-0.00609	-0.242	-0.443***	-0.678***	-0.393***	-0.613***
	(0.0793)	(0.154)	(0.0704)	(0.124)	(0.0576)	(0.0987)
Wealth	0.0359***	0.00572	0.0486***	0.0540***	0.0229***	0.0305***
	(0.0135)	(0.0188)	(0.0112)	(0.0181)	(0.00667)	(0.00875)
Local government	-0.0251	-0.101*	0.0114	0.0438	0.0488**	0.0135
	(0.0298)	(0.0566)	(0.0270)	(0.0428)	(0.0202)	(0.0236)
Philanthropic institutions	0.0174***	0.0308***	0.0215***	0.0120*	0.0219***	-0.00976
	(0.00257)	(0.00535)	(0.00419)	(0.00717)	(0.00508)	(0.00746)
Segregation	1.603***	2.318***	2.380***	2.567***	2.113***	2.856***
	(0.224)	(0.413)	(0.212)	(0.385)	(0.199)	(0.373)
Income inequality	2.090	-2.924	-4.247***	-7.893***	-1.012	-3.702*
	(1.642)	(2.655)	(1.522)	(2.385)	(1.211)	(2.107)
Constant	-1.508*	1.494	2.730***	5.477***	1.450**	3.758***
	(0.858)	(1.477)	(0.829)	(1.324)	(0.620)	(1.078)
Observations	2,080	630	2,247	714	2,317	720
R-squared	0.255	0.356	0.318	0.384	0.322	0.413

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Detailed Decomposition of Contributions to Nonprofit Organizations by Community Diversity

Antipoverty organizations						
	1992		2002		2012	
Mean prediction (Lower diversity)	210.540	***	382.128	***	469.715	***
Mean prediction (High diversity)	154.553	***	300.604	***	400.390	***
Raw Differential (H to L Diversity)	1.362	**	1.271	*	1.173	
due to endowments-E	1.703	***	1.181		0.754	***
SES	1.100		1.030		0.827	***
INST	0.994		0.980		1.027	
SOCDIV	1.557	**	1.170		0.888	
due to coefficients-C	1.039		0.993		1.438	***
SES	6.952	***	3.997	**	2.487	*
INST	1.494		0.835		1.444	
SOCDIV	91.705		1.893		0.399	
Arts and Education						
	1992		2002		2012	
Mean prediction (Lower diversity)	8.313	***	18.538	***	23.831	***
Mean prediction (High diversity)	8.205	***	22.588	***	32.413	***
Raw Differential (H to L Diversity)	1.013		0.821	**	0.735	***
due to endowments-E	1.335	***	1.101		0.811	***
SES	0.959		0.842	***	0.812	***
INST	1.096	***	1.000		0.991	
SOCDIV	1.271	**	1.308	***	1.007	
due to coefficients-C	0.912	*	0.765	**	0.911	
SES	2.176		2.575	**	2.632	***
INST	1.137		0.932		1.343	**
SOCDIV	7.425		4.971		2.593	