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NONPROFIT ORGANIZATIONS IN THE MAKING OF CIVIC COMMUNITY: EXPLORING HOW THE STRUCTURE OF NONPROFIT SECTORS MATTERS FOR COMMUNITY WELLBEING

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
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Doctor of Philosophy

in

The Department of Sociology

by
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ABSTRACT

In this dissertation, through the lens of the civic community perspective, I examine the role of nonprofit organizations in enhancing community wellbeing. The primary contribution of this dissertation to existing literature on civic communities is the theoretical development of the concept of civically engaging institutions. I take a multifaceted approach to the understanding and investigation of civically engaged institutions, in which I expand the concept beyond civic congregations and associations, to include all organizations categorized as nonprofit. Synthesizing literatures on nonprofit organizations and civic communities, I argue that nonprofits can be considered locally oriented and civically engaged as they are economically embedded in locales and dependent on local populations as sources of volunteers and labor, and as consumers for services; they often are exclusively local and/or tailor their services to local populations; they often are oriented towards the public good; and they often are sites and sources of association and civic activities.

This dissertation also contributes to civic community scholarship through the investigation of nonprofits as civic institutions; I examine how the size of local nonprofit sectors is related to community wellbeing. Also, believing that different types of nonprofits offer potentially unique benefits to locales, I examine how local wellbeing is related to the composition of local nonprofit sectors in terms of organizational diversity, organizational evenness, and organizational concentration. I examine these relationships using three analytic models, which explore three components of wellbeing on which past research has found civic institutions to have a positive effect – these are local economic wellbeing, safety, and health. Though findings both support and negate my hypothesized relationships, results demonstrate that nonprofit sector structure is a significant determinant of local quality of life.

INTRODUCTION

The civic community perspective recognizes the potential local business sectors have to (a) increase both community cohesion and sustainability, and (b) positively influence quality of life outcomes. In short, locales (whether it be cities, towns, or spatially bounded communities) dominated by locally owned and run businesses, small manufacturing establishments and other locally oriented enterprises, tend to have lower levels of poverty and crime, as well as better health of residents. Furthermore, residents in such areas seem to identify more deeply with place, and they are more likely to be involved in the civic and business activities of the area. At a time in which urbanization and globalization are thought to threaten civic engagement and community attachment (Blanchard and Matthews 2006; Putnam 1995), civic community research indicates that the prominence and viability of locally oriented business sectors is a possible means to assuage the negative effects of structural changes in society (Irwin et al. 2004; Lyson and Tolbert 2003; Lyson, Torres, and Welsh 2001; Tolbert 2005; Tolbert et al. 2002; Tolbert, Lyson and Irwin 1998).

In keeping with the civic community perspective, in this dissertation, I examine the local nonprofit sector as an integral part of civic communities; I investigate the relationship between the size and composition of local nonprofit sectors and local wellbeing. Such an investigation is important because nonprofit organizations, as both the locus of economic activity and civic engagement, are vital components of civic community and thus have important implications for social and individual wellbeing. My primary research question is to what extent is local wellbeing related to a) the size and b) the composition of local nonprofit sectors. More specifically, I investigate how nonprofit organizational density (i.e., number of nonprofits in a locale, relative to the population size), organizational diversity (i.e., how many nonprofit service

areas are present in a locale), organizational evenness (i.e., how evenly spread nonprofit organizations are across service areas), and organizational concentration (i.e., how concentrated a sector is regarding public benefit organizations) are related economic wellbeing, crime, and health.

In Chapter 1, I provide an overview of the civic community perspective that serves as the theoretical framework for the current investigation. Drawing on nonprofit literature, I then discuss how nonprofit organizations fit into the civic community framework as civically engaged and locally oriented institutions. In Chapter 2, I discuss the data and measures used in analysis, and I provide a descriptive overview of the variables I use to construct my models of community wellbeing. In Chapters 3, 4, and 5, I present my analyses. In each chapter I provide a brief overview of the empirical or theoretical significance of the outcome being measured – economic wellbeing (Chapter 3), safety or crime (Chapter 4) and health (Chapter 5); I detail my analytic methods, and I provide a discussion of my results. Finally, I conclude this dissertation with a summary of my findings and a discussion of the limitations of my study and future implications for research.

CHAPTER 1: NONPROFIT ORGANIZATIONS IN THE MAKING OF CIVIC COMMUNITY - A THEORETICAL FRAMEWORK

The Civic Community Perspective: What Makes Communities Strong

Believing that place is a significant determinant of social outcomes, civic community scholars investigate how "meaningful geographies", places such as cities, towns, and counties, compare to one another in terms of institutional structure, social wellbeing, and quality of life of residents (Tolbert 2005).[1] Such investigations indicate that the institutional structure of place matters. More specifically, civic community scholarship suggests that certain types of businesses and organizations, referred to as locally oriented businesses and civically engaged institutions, are beneficial to communities because they are embedded in locales and geared to the needs of local populations. These types of organizations engender a sense of community and civic responsibility in residents that leads to their increased civic engagement (Tolbert et al. 1998; Tolbert 2002; Tolbert 2005).[2] Research has found that places with relatively large numbers of locally oriented businesses and civically engaged institutions tend to have higher levels of social, political, and economic wellbeing (Irwin and Tolbert 1997; Lee 2008; Lyson et al. 2001; Tolbert et al. 1998; Tolbert 2002; Tolbert 2005).[3]

[1] These places are "meaningful" in the sense that people attach meaning to and identify with such places (Tolbert 2005).

[2] As conceived in this paper, civic engagement refers to "individual and collective actions designed to identify and address issues of public concern. [It] can take many forms, from individual voluntarism to organizational involvement to electoral participation" (American Psychological Association 2009). Civic engagement is advantageous for communities because it encourages community members to connect with one another and work together towards shared goals, often goals that benefit the community (Lee 2008).

[3] Though there are similarities between the civic community perspective and social capital theory, the concept of social capital is not heavily incorporated into the civic community research and theory. Since definitions of social capital that conceive it as both an individual and collective good are highly contested (Lin 199a9; 2001 Portes 1998; 2000), for the purposes of this paper, it is not conceived as such. Instead, social capital refers to resources embedded in social relationships—it can be understood as investment in social relations with expected returns (Lin 1999a; 2001). Such a definition indicates that social capital is important to civic communities, but precludes the understanding that there is some community stock of social capital, to which the community at large has access. This definition is consistent with Tolbert's (2005:1313) assertions that the observations made by civic community scholars, "surely reflects, in part, the consequences of individual stocks of social capital." However, according to

Locally oriented business

Locally oriented businesses are generally small to medium size establishments that are locally owned and/or operated and that produce goods and services geared towards a local population's characteristics and needs (Lee 2008; Lyson et al. 2001; Tolbert et al. 2002; Tolbert 2005).[4] Locally oriented businesses are understood as community assets because they are bound to place, and they root residents in the community. To succeed, such institutions rely on the support of the community residents who are both consumers of goods and services and sources of labor. Consequently, because their own wellbeing is so deeply connected to that of the community, people who own and manage locally oriented businesses (often referred to as independent middle class) tend to be more civically engaged; they tend to make connections to and support other local business people, and their businesses practices tend to reflect the broader public interest (Lee 2008; Lyson et al. 2001; Lyson and Tolbert 2003; Tolbert et al. 1998; Tolbert 2005). Moreover, locally oriented businesses foster connections between workers, employers, and the community. Due to their size, locally oriented businesses tend to be less formalized and bureaucratic, and the division of labor less stringent. In such work environments, employers are more likely to use their personal social networks when seeking employees. In addition, with less formalized rules surrounding work, the interaction among workers and employers also tends to be less formal. These conditions allow deeper connections between coworkers and employers, rooting both to place (Irwin and Tolbert 1997; Lee 2008; Tolbert et al. 2002).

Tolbert (2005:1313), such research does not undertake the necessary individual-level network analyses that measure social capital and, "thus, we make no claims about measuring social capital, per se."

[4] In civic community literature, several similar concepts are used in tandem with or instead of locally oriented businesses including local capitalism, locally oriented capitalism, and independent middle class. Local capitalism simply refers to the presence in a community of locally owned (and oriented) businesses. The independent middle class refers to the persons who own or run such establishments (Lee 2008; Lyson et al. 2001; Tolbert et al. 1998; Tolbert 2002; Tolbert 2005). In this dissertation, as I am primarily interested in the institutions themselves, I do not elaborate on these relationships.

Research has identified several types of businesses that seem to embody this local orientation; they are small manufacturing (enterprises with 20 or fewer employees), family farming, enterprises with no employees (nonemployers), and locally owned retail and services (Irwin and Tolbert 1997; Lyson et al. 2001; Lyson and Tolbert 2003; Tolbert et al. 1998; Tolbert 2005).[5] In addition, civic community scholars have suggested that so long as businesses are exclusively local, that is there is only one establishment or all establishments are located in the same locale, they can also be considered locally oriented (Tolbert 2005).

Civically engaged institutions

Civically engaged or engaging institutions, on the other hand, are other types of community organizations that encourage association and promote or enhance civic engagement. Association, like civic engagement, is important because it embeds people in local communities, encourages the formation of interpersonal ties, and increases community cohesion (Tolbert et al. 1998; Tolbert et al. 2002: 95). Two commonly discussed types of civically engaged organizations found in civic community literature are churches and membership associations.

Churches. There is a vast literature connecting churches and religious participation to civic engagement and social wellbeing. Some scholarship reasons that as result of the resources and opportunities made available in churches, people are better able and more willing to participate in the community and in politics (Campbell 2004; Kwak, Shah, and Holbert 2004). Other findings indicate that religious belief and value systems, such as those that place value on "helping thy neighbor," are conducive to civic behaviors such as charitable giving and volunteering (Cadge and Wuthnow 2006; Sherkat and Ellison 1999; Wilson and Janowski 1995). According to the civic community perspective, because they are a basis of association, churches

[5] In some of their work on the civic community perspective, Tolbert and his associates refer to small, local retail and service establishments as a type of "third places." The term coined by Oldenburg refers to places other than work and home where people can go to interact—for leisure or problem-solving (Lyson and Tolbert 2003; Tolbert 2005).

have the potential to act as catalysts for civic engagement (Tolbert et al. 2002). However, not all churches or denominations equally contribute to civic community. There are those, referred to as civically engaged denominations, "that tend to have a more active civic life than the average denomination," (Irwin and Tolbert 1997). Whether it is that the structure of these denominations is less bureaucratic, more horizontally structured, and therefore more community oriented (Tolbert et al. 1998), or that they are more externally and community orientated (Blanchard 2007; Blanchard et al. 2008), adherents of civically engaged denominations are more likely to form ties to the community that facilitate civic engagement and social cohesion (Blanchard 2007; Blanchard et al. 2008; Lee 2008; Tolbert 2005; Tolbert et al. 1998).

Membership Associations. There is a great deal of scholarship that touts the political and civic import of associations. Much of this work is rooted in observations made in the 19th century by Alexis de Tocqueville. Tocqueville wrote at length on the propensity of Americans to collectively organize and form associations in order to realize common goals and exercise political freedoms. For Tocqueville, associations (and the tendency of Americans to join them) are an important civic asset, because they provide a forum for political discussion and democratic action, engender belief in collective action, and build the capacity for people to "pursue great aims in common" (1969: 520). According to Tocqueville, associations serve to connect seemingly powerless people in a way that gives them a voice and power. These groups are a means by which people can come together to achieve both self-interest and common goals. Following in the spirit of Tocqueville, the civic community perspective understands associations and voluntary organizational or group membership as powerful tools for political action and as conduits for the creation of social ties and ultimately more cohesive communities (Lee 2008; Lyson et al. 2001; Tolbert 2005; Tolbert et al. 2002).

Beyond Associations: Reconceptualizing Secular Civically Engaging Institutions

The civic community perspective provides a framework for investigating and understanding how the institutional structure of place affects community outcomes. In particular, current scholarship on civic communities provides an in-depth understanding of the role of local business sectors in the promotion of local wellbeing. Research has highlighted the types of businesses, such as small retail establishments and nonemployers, that are beneficial to local wellbeing and it has explicated the ways in which locally oriented businesses and local capitalism lead to increased civic engagement and quality of life for residents. In addition, this research has shed light on how local religious environments and faith-based organizations acting as civically engaged institutions augment community wellbeing.

While no less important to the foundation of civic community, secular civically engaging institutions receive far less theoretical and empirical attention. They are often either overlooked entirely (see for example Lyson et al. 2001), or they are narrowly defined and operationalized as civic groups and membership associations such as neighborhood associations and labor unions (for examples see Irwin et al. 2004; Lee 2008; Tolbert et al. 1998; Tolbert et al. 2002). While these measures have provided some indication of the import of such organizations, they do not fully capture the diversity of organizations that can be considered civically engaged nor are they suggestive of how variations in the local composition of such institutions potentially produce different social outcomes.

In this dissertation, I seek to fill what I see as a gap in civic community literature. Extending prior research on civic communities, my goal is to more fully develop the concept of the civically engaging institution – to show how, similar to locally oriented businesses, these organizations can be conceptualized and measured in a more multifaceted manner. More

specifically, drawing from nonprofit research, I am advocating an approach to the investigation of civically engaged institutions that goes beyond membership associations and recognizes the wide array of nonprofit organizations (excluding faith-based institutions) as both civically engaged and locally oriented institutions.[6] To better understand the conceivable importance of nonprofit sectors in local settings and their connection to civic communities, in the following section, I first explain what it means to be nonprofit; I then explain why organizations classified as nonprofits should be considered locally oriented and civically engaged institutions.

Conceptualizing the Nonprofit Sector: What Does It Mean to be Nonprofit?

In the present research, I classify organizations as nonprofit according to the Internal Revenue Service's (IRS) designation of tax-exempt entities.[7] For the IRS, what broadly designates an organization as tax-exempt is not the amount of money it makes (sometimes substantial monies are made, such as in large hospitals and private universities), or how it brings in money, (nonprofits rely on an array of funding, from service and membership fees, to donations, to government grants). Instead, an organization is designated as tax-exempt according to how its proceeds are distributed (Steinberg 2006; Steinberg and Powell 2006). In principle, the distribution of proceeds in tax-exempt organizations is restricted by the "non-distribution constraint", which limits the control founders or managers have over funds and

[6] As there is a vast literature connecting churches and religious participation to civic engagement and social wellbeing (Blanchard et al. 2008, Cadge and Wuthnow 2006; Gronbjerg and Never 2004; Havens, O'Herlihy and Schervish 2006; Lyson et al 2004; Tolbert et al. 2002), and as these institutions are at least modestly represented in civic community literature, in the current research, this particular relationship will not be discussed at length.

[7] According to the Exempt Organizations FAQs section of the IRS website (U.S. Department of Treasury, Internal Revenue Service 2013a), nonprofit status is actually a "state law concept" meaning that the designation is applied at the state-level. At the federal level, organizations exempt from taxes are referred to simply as "tax-exempt organizations." Thus, not all organizations that are legally designated as nonprofit at the state-level are defined as tax-exempt under federal law. For the purposes of simplicity and continuity with previous research, in this paper, I use these terms interchangeably; however, when I refer to nonprofit organizations I am technically speaking of tax-exempt organizations.

allocation of financial surplus.[8] Ultimately, financial surplus is to be used to fulfill an organization's mission; those who control organizational assets must not profit from excess revenue (Hansmann 1980; Preston 1980; Steinberg 2006; Steinberg and Powell 2006).[9, 10] For organizations that comply with the non-distribution constraint, the IRS allows a variety of tax exemptions or leniencies depending on the services provided and clientele served by an organization; the types of organizations that can qualify are quite varied – they include (but are not limited to) private schools and universities, museums, hospitals, homeless shelters, social clubs, fraternal associations, and charitable trusts.[11]

With this in mind, when I speak of nonprofits, I refer to organizations given preferential tax status because of their assumed compliance with the non-distribution constraint. These organizations are formally recognized as tax-exempt (or receive preferential treatment) according to rules established in section 501(a) of the Internal Revenue Code (IRC); they are those described under IRC sections 501(c), (e) and (k), as well as 521(a), 4947 (a)(1), and 4947 (a)(2).[12]

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[8] There is some dispute over the extent to which the non-distribution constraint is applied, because often it is not monitored or enforced properly, and there are ways in which it can legally be manipulated (Steinberg 2006: 126).

[9] In other words, nonprofit organizations, by way of the non-distribution constraint, are to ensure that people are "*reasonably* compensated" for goods and services provided, and that organizational control is not to be used for excessive personal gain (Hansmann 1980: 835, emphasis added). With this said, it must be noted that in practice, the non-distribution constraint, and what is considered "reasonable" compensation is relative—monetary compensation often is dependent on organizational size, assets, and job requirements. In some cases, especially when organizations compete and depend on service revenue, substantial salaries and wages are considered a reasonable expense in the ultimate pursuit of goals (Leete 2006).

[10] Understanding how nonprofits are treated by the IRS is important because it indicates an incongruity between what nonprofit "really" means and common understandings of such organizations—e.g., they primarily are social service organizations that serve the poor; they do not make money; or that people who work for nonprofits either do so voluntarily or with little compensation. Viewing and defining nonprofits in light of the nondistribution constraint is imperative because misconceptions about what nonprofit organizations are, or do misdirect both the public and policy makers. Misconceptions can cause these groups to mistrust nonprofit organizations and the people who run them, perhaps unwarrantedly (Ben-Ner 1994; Leete 2006).

[11] For more information on the IRS classification of tax-exempt status see: http: //www.irs.gov/pub/irs-pdf/p557.pdf

[12] Organizations described in IRC sections 521(a) (farmers cooperatives), 4947 (a)(1), and 4947 (a)(2) (nonexempt charitable and split-interest trusts, respectively). are not fully tax-exempt but are organized for charitable purposes and receive favorable tax status under the IRC 501(a).

While there is reason to investigate the many different types of nonprofits, in research nonprofits are often grouped and studied according to broad organizational purpose and/or activity. For instance, one common practice is to separate nonprofits into three rather basic groups: 1) public charities and private foundations; 2) mutual benefit and membership associations; and 3) social welfare and advocacy organizations (Urban Institute, National Center for Charitable Statistics 2009b; Gronbjerg and Paarlberg 2001; Steinberg and Powell 2006). In this investigation, in addition to examining nonprofits as a general type, I also explore how different types of organizations provide potentially different benefits to locales. I rely on an established categorization system, the *National Taxonomy of Exempt Entities* (NTEE), which according to the Urban Institute's National Center for Charitable Statistics (NCCS) (2009d), "divides the universe of nonprofit organizations into 26 major groups under 10 broad categories" according to organizational service areas.[13] In addition, I create my own classification, which categorizes nonprofits as one of two organizational types – *public benefit organizations* and *member benefit organizations* – according to IRC classifications of the groups/purposes they serve.[14] Below I provide an overview of these two organizational types, for a descriptive breakdown of the organizations by IRC categorization, see Table A1 in Appendix A.

Public benefit organizations

Described under IRC sections 501(c)3, 501(c)4, as well as 501(e) and 501(k), public benefit organizations encompass public charities and private foundations, as well as social welfare and advocacy organizations. These organizations represent the vast majority of all nonprofit organizations.[15] While many people connote the term charity with "helping the needy",

[13] See Table A3 in Appendix A for a descriptive breakdown of NTEE categories.
[14] For a more detailed look at how nonprofit organizations are classified see Table A1 in Appendix A.
[15] According to the Urban Institute, National Center for Charitable Statistics (2010), as of 2008 these types of organizations accounted for nearly 78% percent of the nonprofit sector. More specifically, approximately 63% of

public charities are in fact organizations which (according to the IRS) benefit the *broad public interest*—these organizations include those that serve the needy, (such as soup kitchens), but also include (but are not limited to) organizations that provide cultural services (such as museums), health services (such as hospitals), and educational services (such as private schools) (Gronbjerg and Paarlberg 2001; Steinberg and Powell 2006; The Urban Institute, National Center for Charitable Statistics 2009b).[16] As complements of sorts to charities, private foundations are typically grant-making entities on which some public charities rely for financial support (The Urban Institute, National Center for Charitable Statistics 2009c). In their roles as financers and advisors to other nonprofits, foundations are considered "critical intermediaries" in the sector (Steinberg and Powell 2006: 7). What is more, according to Prewitt (2006), the true value of foundations comes in their roles as catalysts in social change—giving credence and attention to important social issues—and in their supportive roles providing assets such as professional leadership and "academic respectability" to other nonprofits. Advocacy and social welfare organizations, which have a "substantial interest in influencing public policy and/ or promoting [particular] positions" on substantive issues," tend to the public good by advocating for groups and issues that benefit what they consider to be in "the public interest" (Jenkins 2006: 305).

Whether it is by giving voice to unrepresented peoples (Jenkins 2006), by acting as a part of the social safety-net that provides opportunities and support to people in need (Deschenes, McLaughlin and O'Donoghue 2006: 520), or through the provision of services—such as health care, elder care, job training, or art programs—these organizations offer an array of social goods,

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organizations were characterized as public charities, 8% were private foundations, and 7% were social welfare or advocacy organizations. The remaining 22% of organizations fall under the umbrella of member-interest organizations.

[16] The notion of "public interest" has been challenged on the grounds that the definition of such interest is rather subjective. However, this argument is outside the scope of the current paper. For a brief discussion of public interest as it relates to advocacy, see Jenkins 2006.

services, and benefits. They are deemed public benefit organizations due to their promise (or mission) to act on behalf of, or benefit the public in some manner.

Member benefit organizations

In contrast to the public benefit portion of nonprofit sector, the member benefit portion of the sector is comprised of membership associations and mutual-benefit organizations, which are organized for the benefit of members.[17] Membership associations are groups of persons who are organized primarily to promote common social, recreational, or business/employment interests of members; membership in such organizations is strictly voluntary.[18] These are organizations such as chambers of commerce, business leagues, fraternal and sororal organizations, recreational clubs, and civic clubs that advocate and lobby with member benefit in mind (Gronbjerg and Paarlberg 2001; U.S. Department of Treasury, Internal Revenue Service 2011).

Similar to membership associations mutual benefit organizations provide benefits to members. However, the benefits they offer are primarily of a monetary or economic nature. Members join a mutual benefit organization to obtain specific services at cost and, as members, they have a say in the management of the organizations.[19] Examples of such organizations are member-credit unions, mutual insurance companies, voluntary employee beneficiary associations, and farmers' cooperatives.

[17] IRS publications refer to both types of member benefit organizations as associations. However, to avoid confusion, I do not refer to mutual-benefit organizations as such.

[18] This definition derives from IRS definitions of organizations. To be considered membership associations, the primary purpose of the organization must be the *active* pursuit of members common interests. As examples, business leagues promote the common business interest of members; labor organizations promote common employment interests of members; fraternal organizations come together on the bases of a "similar calling, avocation or profession" to assist members and promote common interests, and recreational clubs are formed to serve the social and recreational interest of members (Barnett and Ward 2004; U.S. Department of Treasury, Internal Revenue Service 2011). See Table A1 in Appendix A for a descriptive breakdown of organizations.

[19] This definition is borrowed from the IRS's (U.S. Department of Treasury, Internal Revenue Service 2011: 57) definition of organizations that exhibit a "mutual character". Such organizations are "organized and operated on a mutual or cooperative basis. They are [groups] of persons or organizations, or both, banded together to provide themselves a mutually desirable service at cost and on a mutual basis." The quoted text was changed from "association" to "group"; see footnote 17.

Understanding Nonprofit Organizations as Integral Components of Civic Communities

There are two primary reasons the nonprofit sector and nonprofit organizations should be considered integral in the promotion of social wellbeing and the maintenance of civic communities. First, as they encourage association and civic activity, many nonprofits are sites and sources of civic engagement and social cohesion. Second, they are economically embedded in locales, oriented towards local populations, and/or exclusively local enterprises. Taken together, these are the characteristics associated with civically engaging institutions and locally oriented businesses, suggesting that nonprofit organizations have the capacity to fill both roles.

Seeing nonprofits as civically engaging institutions

While they do so in different ways, public- and member benefit organizations promote social wellbeing by encouraging association, civic engagement, and enhancing social cohesion.[20] The primary means by which public benefit organizations promote civic engagement, and in turn social wellbeing, is volunteering.[21] Research has shown that volunteering promotes other forms of civic engagement, such as political participation; it promotes social integration (an important feature of civic communities), not to mention better physical and mental health (Wilson 2000). As they provide "the lions share" of volunteering opportunities (Leete 2006), public benefit nonprofits establish connections and build trust among individuals that promote civic engagement, and they provide opportunities and skills that make engagement possible (Clemens 2006; Leete 2006; Rotolo and Wilson 2006; Salamon and Anheier 1997; Tolbert et al. 1998).

[20] While the presence of mutual benefit nonprofits may affect wellbeing (especially as they are oriented towards and provide benefits to local groups), there is currently no theoretical reason to believe that such organizations encourage the civic behaviors characteristic of civically-engaging institutions. In any analysis of civic engagement, these organizations should be parsed out from other member-interest organizations.

[21] Volunteering is the active engagement of individuals in the production of collective goods (Salamon and Anheier 1997; Wilson 2000).

Member benefit organizations on the other hand have a proclivity to encourage association among members and in turn collective action and civic engagement. According to Lee (2008: 456), "communities with a robust social and civic associational and institutional base have a more densely structured matrix of informal and institutional resources through which social action on behalf of the community itself can be realized." Scholarship reasons that as result of the resources made available in associations, social clubs, and community groups, such as leadership skills, civic opportunities, and letter writing campaigns, people are better able and more willing to participate in the community and in politics (Clemens 2006; Kwak, Shah, and Holbert 2004). Furthermore, these types of organizations, which bring people with common interests together, are said to foster social trust in members and participants—this trust is found to be a determinant of collective action and civic participation (Anheier and Kendall 2002; Knoke 1986; Kwak et al. 2004; Tschirhart 2006).

As Tolbert et al. (2002: 95) state, "civic welfare should increase where there are more organizations that encourage association and are oriented toward the public good…both [organizational characteristics]…increase community cohesion." Thus, as public- and member benefit nonprofits are potential catalysts for civic and social engagement, they can be considered civically engaging institutions and they should be recognized as integral parts of civic communities.

Seeing nonprofits as locally oriented businesses

Another potentially significant way nonprofits contribute to social wellbeing is through their roles as locally oriented businesses. As was previously mentioned, local orientation is an important characteristic of businesses in civic communities, because it embeds people and organizations in place; it enhances social trust, and it increases capacity for local problem

solving. Locally oriented organizations are closely tied to localities—they are likely locally owned and operated, they depend on local labor supplies, and they produce goods for and serve local populations (Tolbert 2005).

Nonprofit organizations can be considered locally oriented businesses for several reasons. First, nonprofits are said to be "deeply embedded" in the communities in which they are located (Gronbjerg and Paarlberg 2001). As of 2006, nationwide, paid employment in the sector accounted for approximately eight percent of the nation's workforce (The Urban Institute, National Center for Charitable Statistics 2009a). Moreover, research has shown that the higher the concentration of nonprofit organizations, the more local labor supplies stay within a community (Gronbjerg and Paarlberg 2001). Though nonprofit employment varies across place, this suggests that nonprofits are economically entrenched within communities – organizations are reliant on local labor supplies and by the same token, local areas are dependent on nonprofits as an employment source. Civic community scholars have established that when businesses rely on local labor and on local commerce, they are more likely to make business decisions that are beneficial to that locale (Tolbert 2005). Thus, in their role in local economies, many nonprofit organizations can be considered locally oriented businesses.

Second, in his discussion of the "community field", Wilkinson (1991) suggests that locally-oriented organizations are those in which goals, interests, and actions are directed towards the local concerns and public-interests. As was previously discussed, nonprofits are organized for the benefit of society or for some particular social group. This makes many nonprofits, such as social welfare agencies, chambers of commerce, and local chapters of fraternal societies that direct their actions and services at least in part to local needs and concerns inherently locally oriented. In addition, research has shown that in certain industries where

nonprofits compete with for-profit and government enterprises, such as healthcare, nonprofits are more likely to cater their services to local needs – suggesting that nonprofits tend to be more locally oriented than their for-profit counterparts (Schlesinger and Gray 2006).

Third, many nonprofit organizations, such as museums, schools, local charities, business leagues, and associations consist of only one establishment or all establishments are located within the local area. According to Tolbert (2005), because they are exclusively local, they can be considered locally-oriented as well.

Finally, research indicates that nonprofit employment is linked to significantly higher rates of volunteering (Rotolo and Wilson 2006). As was previously mentioned, volunteering is an important civic activity that leads to enhanced civic engagement and social cohesion. Therefore, nonprofits tend to have a civically engaged workforce that is characteristic of locally oriented businesses.

In sum, local orientation is important because it attaches organizations and their members to place and it allows organizations to better address the needs of local populations (Schlesinger and Gray 2006; Tolbert 2005). Nonprofits can be considered locally oriented, because they are economically embedded in locales; they tend to offer services and goods geared towards local peoples, and local people's needs; many are dependent on local donations, local labor pools, and local consumers, and they promote civic engagement of employees.

Why Nonprofit: Summary and Research Expectations

As fixtures in local institutional structures, nonprofit sectors and the organizations subsumed within have the potential to affect local quality of life. From employment opportunities, to a wide range of services (spanning from cultural to legal to social welfare services), to opportunities for civic engagement and local problem solving, nonprofit

organizations provide valuable economic and social inputs. As these organizations tend to be oriented to local populations and as they facilitate civic engagement, they can be considered both locally oriented and civically engaging institutions and vital components of civic communities. The problem, and what I seek to remedy in this dissertation, is that in practice civic community literature does not recognize nonprofit organizations as central facets of civic communities. Instead, past research has narrowly focused on faith-based organizations and membership associations (which are types of nonprofit organizations) as civically engaged institutions, overlooking the contributions of other types of nonprofits, such as schools, museums, and hospitals, that provide similar benefits to communities (e.g., opportunities for civic participation, the creation of social bonds, and volunteering). Therefore, building on prior research on civic communities, the primary question of investigation in this dissertation is, "To what extent are local nonprofit sectors (that is, all nonprofit organizations in a locale), as integral elements of civic community, related to local quality of life?" In addition, I also address questions of how the composition of nonprofit sectors, in terms of types of organizations present, affects outcomes. Based on the research on civic communities and nonprofit organizations outlined previously, the following outcomes are expected.

Hypotheses

Since it is my argument that nonprofit organizations can be considered both locally oriented businesses and civically engaged institutions, and following civic community research that shows the concentration of such organizations to be positively associated with wellbeing, I expect larger nonprofit sectors to be positively associated with wellbeing.

H1: The larger the nonprofit sector, the greater the levels of wellbeing.

In addition, since nonprofit organizations are organized for different purposes and offer an array of products and services to localities, it is expected that the different types of organizations will offer potentially unique contributions to wellbeing. Following this reasoning, I surmise that due to the nature of their mission to provide a broad social benefit, public-benefit organizations (above and beyond their contribution to civic engagement and social cohesion) are more likely to enhance social or community wellbeing as compared to their member benefit counterparts that more narrowly promise benefits to particular social groups. Therefore, I expect that sectors comprised of a higher percentage of public benefit organizations (and consequently, a lower percentage of member benefit organizations) will have higher levels of wellbeing.

> H2a: The greater the concentration of public-benefit organizations, the greater the levels of wellbeing.

Though I do not have evidence of how the diversity of nonprofits may contribute to wellbeing, following research that explores the role of industrial diversity in enhancing economic outcomes (for examples see: Attaran 1986; Garcia-Milà and McGuire 1992; Tran 2001) I argue that communities with more diverse sectors, rather than sectors dominated by one or a few service types are more able to maximize on the different services and benefits offered by nonprofits. As such, it is expected that locales with more diverse sectors in terms of the types of services provided , and those that have a more even distribution of organizational types (that is, they not dominated by one type of organization) will have better quality of life outcomes.

> H2b: The more diverse the sector is regarding types of organizations present, the greater the levels of wellbeing.

> H2c: The more evenly spread the nonprofit sector is in terms of types of organizations present (i.e., the less concentrated the sector is), the greater the levels of wellbeing.

CHAPTER 2: DATA AND MEASURES

Data

To explore how community characteristics and nonprofit structures affect local levels of wellbeing, I employ county-level data in my analyses. Researchers have identified counties as meaningful geographies in part because as political entities they serve to structure the lives of residents (Curtis et al. 2011; Lyson et al. 2001; Tolbert et al. 1998; Tolbert 2005). In addition, though people might not resonate with counties as they do with smaller, more localized communities (e.g., cities, towns), researchers have shown that findings from studies of community welfare in these more localized communities can also apply to larger governing bodies like counties (Lyson et al. 2001). Furthermore, county-level analysis is especially pertinent to a study concerning nonprofit sector structure because decisions about the delivery of social services and goods (such as nutritional programs, health care, and education) are often made at the county level. As nonprofit organizations are often providers of such services, research suggests that the county can be a significant source of variation in terms of the size and effectiveness of nonprofit sectors (Gronbjerg and Paarlberg 2001; McLaughlin, Stokes, and Nonyama 2001). All of the data used in analyses are obtained from secondary sources and are either available at, or aggregated to, the county-level.

Nonprofit data

The data I use for my measures of local nonprofit structure and composition come from the Internal Revenue Service's (IRS) *Business Master Files* (BMF), which are made available to researchers (at a cost) by the National Center for Charitable Statistics (NCCS). While new data are made available every year, I employ data from 2001, to keep consistent with my other

independent variable data sources.[22] The 2001 BMF (*n*=1,291,867) is an organization-level dataset that includes county-level identifiers, limited financial information for filing organizations (assets, revenue and gross receipts), along with descriptive information, such as IRC classifications (i.e., organizational tax category) and NTEE codes, for all organizations registered with the IRS (The Urban Institute, National Center for Charitable Statistics 2006).[23]

Nonprofit data limitations.[24] There are two notable problems with the BMF data, which primarily result from exemptions made for registering and filing. First, churches or congregations and some of their affiliates, as well as most very small organizations (those with less than $5,000 in annual gross receipts) do not have to register with the IRS to be considered tax-exempt (all private foundations must register). These organizations can register voluntarily; however since it is not systematically enforced, information on many very small organizations is not available (Urban Institute, National Center for Charitable Statistics 2006).[25] Second, as the NCCS data manager reports, in some cases the data in the BMF extracts are inaccurate. Inaccuracies result in part from the fact that some nonprofits, such as small tax-exempt organization, are not required to file an *Annual Information Return* (U.S. Department of

[22] BMF data are released monthly by the IRS. The BMF data used in this analysis were compiled by NCCS in July of 2001 meaning that they capture organizations that filed up to that date.

[23] With a few exceptions, tax-exempt organizations must register with the IRS and file an "annual information return" (form 990 or 990-EZ) in order to receive or renew their tax-exempt status. Information for all organizations is recorded in the BMF when they register (receive tax-exempt status), and it is continually updated (on a monthly basis) for organizations that file returns (U.S. Department of Treasury, Internal Revenue Service 2012b, 2013b).

[24] My understandings of the NCCS compiled BMF data come from cited Urban Institute, National Center for Charitable Statistics materials, as well as from phone correspondence with the NCCS data manager, which occurred on January 19th 2012.

[25] Of primary concern to the current research is the fact that the estimation of very small organizations that are not required to register, such as neighborhood associations and local community groups that are known to be sources of civic activity, will be inconsistent at best. Therefore, I will have an incomplete understanding of the composition of local nonprofit sectors. I considered dropping very small organizations from the dataset as an imperfect way to control these discrepancies; however there is no variable that identifies organizations that are not required to register. I considered but ultimately decided against dropping organizations with less than $5,000 gross annual receipts because a) financial variables are point estimates – there is no guarantee that income reported is characteristic of what the organization typically brings in or that these organizations voluntarily registered, and b) as discussed, the financial data are prone to errors.

Treasury, Internal Revenue Service 2012b).[26] According to the data manager at NCCS, because of this filing exemption, BMF data (at least those compiled prior to 2011) are problematic because they include information that may be outdated. In some cases data extracted from IRS listings do not contain accurate information on financial records, organizational location, organizational activities, and in some cases, they contain information on organizations that are no longer "alive" (i.e., offering services).[27] Moreover, NCCS has found that in many instances, BMF data (extracted from IRS listings) contain erroneous information that results from clerical errors, such as misplaced commas or decimal points.

While BMF data have several notable limitations, I believe they are the best source for the current analyses because they allow me to go beyond prior research done on civic communities that only considers associations, civic groups, and religious organizations as civically engaging institutions.[28] With the BMF dataset obtained from NCCS, I am able to consider not only the relationship between wellbeing and local nonprofit sector size, but I am also able to explore how the composition of local nonprofit sectors relates to wellbeing.

[26] Small tax-exempt organizations, those with $50,000 or less as of 2010 or $25,000 or less prior to that date, do not have to file an annual information return (U.S. Department of Treasury, Internal Revenue Service 2012b).

[27] As a note, the NCCS data manager explained that in the past several years, the IRS has worked to correct some of these problems, and more recent BMF data (the data manager suggests those from 2011 and beyond) are far more reliable. The biggest change occurred in 2008 when the IRS implemented the 990-N, an electronic post card that all small registered organizations must file at least once every three years that informs the IRS that they are still active, and alerts the IRS to any potential changes in pertinent organizational information (such as location). Information on the 990-N can be found at: http: //www.irs.gov/Charities-&-Non-Profits/Annual-Electronic-Filing-Requirement-for-Small-Exempt-Organizations--Form-990-N-%28e-Postcard%29

[28] In the examination of civically engaging institutions, previous research has used data from sources such as *County Business Patterns* (CBP) (Lee 2008) and the *Census of Services* (Tolbert et al. 2002). While a North American Industry Classification System (NAICS) to NTEE crosswalk exists that would allow me to use these and other sources of data (e.g., the Economic Census) to examine nonprofit organizations, these alternative datasets do not include all of the information that I utilize in analysis (e.g., CBP data do not have data on nonemployers or organizations that do not file annual tax returns and none include IRC classification or other variables added to the BMF dataset by NCCS.) In future research, I would like to employ other sources of data, because I believe they can shed light on how employment in the nonprofit sector is related to wellbeing. The *NCCS NTEE/NAICS/SIC Crosswalk* can be found on the NCCS website at http: //nccs.urban.org/classification/NAICS.cfm.

Nonprofit data management. Prior to merging the BMF data with other data used in this investigation, the dataset was prepared in several ways. First, there were a number of observations for which no FIPS code was recorded. For these cases, where possible, I used the zip code to identify the corresponding county code. Using the zip code, I searched the internet to identify the county in which the organization was located. Where possible, I relied on an official website, such as a local government webpage. However, in some cases I relied on other sources such as realty websites that may not be as accurate. Once a county was identified, I used the county FIPS crosswalk provided on the census webpage to identify FIPS codes. I drop from the dataset all observations for which a FIPS code could not be determined.

Second, the dataset contains identifiers for organizations considered by NCCS to be "out-of-scope". Organizations are considered out-of-scope if they a) are foreign-based or operate overseas, b) do not have geographic identifiers, or c) are governmental (Urban Institute, National Center for Charitable Statistics 2006). Since I make the argument that nonprofits should be considered locally oriented (and therefore based in and serving the community), it seems inconsistent to examine foreign based or operated organizations. In addition, I wish to avoid confounding results by including organizations deemed public entities. Therefore, I drop out-of-scope organizations from the dataset.

Third, though no observations are exact duplicates (in no case do observations share Employer Identification Numbers), there are a substantial number of observations that share identical characteristics for important identifiers such as organizational name and location. Though there are reasons the same organization may be represented more than once in the database (for instance, an organization has several branches which are incorporated under separate tax statuses, or an organization has multiple subsidiaries for which a parent organization

files) I exclude duplicated observations so that the size and composition of *local* sectors (in terms of the number of establishments present) is clear.[29,30] Considered as duplicates are observations that have identical organizational names, locations (as determined by zip code), and IRC codes.[31] In instances where duplicates were identified, I retained the observation with the most recent filing date.

Fourth, I exclude all organizations that are affiliated with churches or congregations. As previously stated, scholarship on quality of life outcomes and on civic communities emphasizes the importance of these types of organizations; however, the primary task of this investigation is to better understand how civically engaging, secular organizations affect community wellbeing.[32] As I discuss later, in analysis I control for religious aspects of places; however, since congregations and their affiliates are not required to register with the IRS, any measure of religious organizations derived from the BMF will be incomplete. Therefore, measures from other data sources (to be discussed shortly) are used in analyses.

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[29]In deciding to exclude duplicates, I considered the consequences of possibly including the same organization (or same establishment) multiple times against those for erroneously excluding organizations that are in fact separate establishments (e.g., affiliates of the same parent organization). Looking at the distribution of duplicates, it appears that in approximately half (48%) of duplicated cases, organizations are duplicated (or are entered in the dataset) two or three times. On the contrary, nearly one-third of organizations (68%) appear in the dataset a minimum of 10 times; over 10,000 are entered in the dataset over 1,000 times. With this distribution in mind, the rationale for exclusion is that though there may be more than one organizational affiliate (establishment) operating in a locale, the likelihood of numerous affiliates in a small geographical area such as a zip code, is relatively small I do not want to make an arbitrary decision about how many duplicated observations is acceptable, therefore , I feel it is prudent to exclude all duplicates.

[30] It should be noted, that duplicated organizations were not evenly distributed across the nonprofit spectrum (as determined by IRC classification). Nearly all duplicates fell under one of eight tax-exempt classifications; they are as follows: 501(c)(3) (41%); 501(c)(8) (19%); 501(c)(4) (13%); 501(c)(5) (9%); 501(c)(10) (7%); 501(c)(6) (5%); 501(c)(7) (3%); and 501(c)(19) (3%).

[31] As an example, in the dataset there are 33 observations for the organization named Air Line Pilots Association; an additional 70 observations are listed under one of four permutations of this name (e.g., AirLine Pilots Association). All are incorporated under the same IRC section ((501(C)(5)) and are located within the same zip code in Virginia.

[32] There is a vast literature connecting churches and religious participation to civic engagement and social wellbeing (Blanchard et al. 2008, Cadge and Wuthnow 2006; Gronbjerg and Never 2004; Havens, O'Herlihy and Schervish 2006; Lyson et al. 2004; Tolbert et al. 2002), and these institutions are at least modestly represented in civic community literature. To include them in measures of nonprofit sector may only serve to obscure or confound effects of other organizational types. Investigations that seek to parse out the relationship between secular and religious components of the sector and wellbeing are warranted; however, they are outside the scope of the current study.

It should be noted that in light of the data limitations previously discussed, I constructed a secondary dataset that includes only those organizations that recently filed with the IRS (within three years of the BMF publication date). NCCS provides in its BMF dataset variables containing updated and verified information for these organizations; according to the NCCS data manager, these data are more robust, accurate, and relative to the BMF publishing date. Using these updated data, I run sensitivity analyses for each of my models (to be discussed shortly) and I report notable deviations from my primary analysis where applicable.[33] Table A1 in Appendix A provides descriptive statistics that highlight changes made to the BMF dataset.

Other data sources

For indicators of social wellbeing and civic community and for county-level controls, I rely on the following additional data sources made available through *USA Counties* and *County Characteristics*: The *American Community Survey* (ACS), *County Business Patterns* (CBP)*; Nonemployers Statistics;* the *FBI Uniform Crime Report* (UCR); The Centers for Disease Control (CDC) National Center for Health Statistics (NCHS); U.S. Department of Agriculture (USDA) Economic Research Service (ERS); Health Resources and Services Administration (HRSA) Geospatial Data Warehouse; the 2000 *Decennial Census.* In addition, for measures of congregations and adherents I use the 2000 *Religious Congregations and Membership Study* (RCMS) sponsored by the *Association of Statisticians of American Religious Bodies* (ASARB) and made available through the *Association of Religion Data Archives* (ARDA). After

[33] As a note, both datasets have drawbacks. I chose not to use the updated dataset as my primary data source because of the fact that small organizations not required to file annually will potentially be absent from this dataset. Since I want to capture the range of organizations within the nonprofit sector, I do not want to bias my results by leaving out small organizations.

aggregating and merging the data gathered from these various sources, the resulting dataset contains 3070 counties from the contiguous U.S.[34]

Variable Specification: Dependent Variables

Economic wellbeing

I employ two indicators of economic wellbeing found to be associated with civic community indicators in prior research – county-level family poverty and household income (Lyson et al. 2001; Irwin et al. 2002; Tolbert et al. 1998; Tolbert 2005). Data for both indicators are derived from ACS 2005-2009 period estimates; these are interpreted as estimates of the middle year, 2007.[35,36]

Poverty is measured as the percent of families in a county living below the poverty line. The poverty line refers to the income threshold below which an individual or family is considered to be living in poverty. There are in fact numerous poverty lines or poverty thresholds for determining poverty status (48 to be exact); these are established by the U.S. Census Bureau and are relative to family size and ages of family members. In determining poverty status, taken into consideration are all forms of money income before taxes including, but not limited to, earnings, cash benefits (e.g., unemployment compensation, workers'

[34] Prior to merging, the datasets contained a varying number of counties. In order to retain as much data as possible, I aggregated data for independent cities with data from their parent counties. First, I recoded the cities FIPS codes to that of their parent counties; then I collapsed the data into that of the parent county. In addition, I dropped from the dataset non-contiguous counties or places found in Hawaii, Alaska, and Puerto Rico. These places are commonly dropped from place-based regressions because of their unique political, cultural, and geographical characteristics that can affect statistical results (i.e., they are dropped to control for heteroskedasticity).

[35] As opposed to point estimates (such as decennial census data) which describe phenomena at particular points in time, period estimates are averages over the data collection period. Thus, data used in this investigation represent average estimates of the period between the years of 2005 and 2009. For the purpose of concision, I interpret ACS multi-year, period estimates (referred to as MYE) as an estimate of the middle year (2007). However, it should be noted that Beaghen and Weidman (2008: 16) suggest that one should not interpret MYEs as descriptions of the center year unless the change over time is roughly linear and I do not have the data to support this assertion.

[36] I chose the 2005-2009, five-year ACS estimates for several reasons. First, these estimates are more precise and reliable than either the one- or three-year estimates. Second, many counties have relatively small populations and the five-year estimates are the only ones to include geographies with populations of less than 65,000. Finally, the 2005-2009 estimates are the first five-year estimates to be released and are the most relative, in reference to time, to my independent data (Beaghen and Weidman 2008; Beaghen et al. 2012; Bishaw et al. 2008).

compensation), pensions, interest, and child support. The Census Bureau updates poverty thresholds annually – they are adjusted for inflation using the *Consumer Price Index for All Urban Consumers* (CPI-U).[37] Census defined thresholds for a family of four were $19,971, $21,203, and $21,954 for the years 2005, 2007, 2009 (which represents the beginning, mid-point, and end-point of the poverty period estimate), respectively.[38]

The indicator of income presently employed is median household income. Household income in the ACS includes the money income of all persons in a household (related or not) over the age of 15. The median represents the middle point of the income distribution in which half of households are above and half are below (Bishaw et al. 2008). Due to the fact that the household income in the U.S.is not normally distributed – a small proportion of the population holds the majority of the country's wealth – median income is commonly employed in research and government reporting as the preferred measure of central tendency (Bishaw et al. 2008: Orzechowski and Sepielli 2003).[39]

The process of dissolving independent cities into their parent counties requires that I aggregate the data. Since I do not use raw data to construct my measures (rather I use percent of families in poverty and median income as calculated in the ACS dataset), I have to take into account differences in the populations of the counties and independent cities being combined. Therefore, I weighted the poverty measure by the number of families in a county and the median

[37] Information on poverty calculations in the ACS can be found at: http: //www.census.gov/hhes/www/poverty/poverty-cal-in-acs.pdf. Information on how the Census Bureau measures poverty can be found: http: //www.census.gov/hhes/www/poverty/about/overview/measure.html. Poverty thresholds were retrieved on May 25, 2012 from: http: //www.census.gov/hhes/www/poverty/data/threshld/index.html.

[38] ACS data conform to this definition of poverty. For more information on how poverty is calculated in the ACS see:
http: //www.census.gov/hhes/www/poverty/poverty-cal-in-acs.pdf

[39] Money income measures, such as median household income, are considered by some limited measures of economic wellbeing because they do not capture the effects of economic policy (for instance taxes and tax laws) and non-cash assets and benefits (such as investments, insurance policies, and non-cash government assistance) (Cleveland 2005). However, as this investigation is largely exploratory and as other civic community researchers have used such measures in prior research, here it is considered a satisfactory measure of economic wellbeing.

income measure by county population. That is prior to aggregation, I multiplied the poverty measure by the number of families in the county and the median county household income by the number of households in the county; I then aggregated as the sum of the product (for all counties dissolved into the parent county). After aggregation, I reconstructed the measures (i.e., I divided the poverty and income measures by the number of families and households, respectively, for all counties dissolved into the parent county).

Crime

Past research on civic communities has operationalized crime in a number of ways. Most commonly researchers employ a composite measure which takes into account multiple types of crimes; measures used in prior research include the Uniform Crime Rate composite index (Tolbert 2005), the count of violent crimes (Lee 2008; Lee and Thomas 2010), and the violent crime rate (Lee 2006; Lyson et al. 2001). In this dissertation, I break from this convention and use as my indicator of crime a single item measure – number of homicides. Homicide is employed because a) it is relatively systematically reported, especially as compared to other types of crimes which tend to be under- or inconsistently reported, and b) it is known to be highly correlated with other types of violent crime (Fajnzylber, Lederman, and Loayza 2000; Fajnzylber, Lederman, and Loayza 2002; Fox and Zawitz 2000; Lee 2008). Using data from the *Uniform Crime Reporting Program* (UCR) of the FBI, homicide is measured as the five-year (2004-2008) average of the number of murders and non-negligent manslaughters reported to police.[40] Averaging homicides over a five year period helps to "smooth" the data; that is it helps to control for random variability in the data, which occurs because homicide is a rare event (Lee and Bartowski 2004b).

[40] UCR data from 2001 to 2008 were available through USA Counties. I use data from 2004-2008 in order to keep my dependent variables as consistent as possible.

Health

Consistent with Tolbert's (2005) research on the relationship between health and local institutional structure, in this dissertation I employ a measure of infant mortality as a proxy measure for community health. According to Reidpath and Allotey (2003: 344), infant mortality is an important measure of community health and wellbeing, "reflecting the intuition that structural factors affecting the health of entire populations have an impact on the mortality rate of infants." Using data from NCHS I construct the measure as the five year average (2003-2007) of the number of infant deaths (deaths of children ages 0-1) in a county.[41]

Variable Specification: Nonprofit Sector Organizations

For the current investigation, the nonprofit sector is operationally defined as all organizations described under IRC sections 501(c) - (f) and (k), as well as 521(a), 4947 (a)(1), and 4947 (a)(2), that are incorporated into the BMF dataset.

Nonprofit sector size

In the investigation of the institutional structure of civic communities, past research has examined the relationship between wellbeing and the number of several types of local establishments in an area including family farms, small business, and small manufacturing (Tolbert 2005; Tolbert et al. 1998). Taken together, these measures are indicative of the size of local business sectors. The size of the sector gives an indication of its scope—its capacity to effect both economic and social wellbeing. In an attempt to keep consistent with prior literature, I developed a similar measure of the size of local nonprofit sectors

Organizational density – the number of all nonprofits present in a county per 10,000 residents – is employed as my primary measure of sector size. Organizational density is thought

[41] I compute infant mortality as a five year average as a means to keep my dependent variable constructions consistent. I use data from 2003-2007 because these were the most recent years available through USA counties.

to be an important measure of sector size because the more dense the sector, the greater the potential for residents to access nonprofit organizations, services, and volunteering/donating opportunities and the greater the potential for residents to interact, form ties, and collectively organize. As a note, a confirmatory factor analysis shows that as constructed, organizational density is measuring the same underlying concept as the other civic community measures included in the model (on which the construction was based) – nonemployers, small retail establishments, and small manufacturing.[42]

Nonprofit sector composition

Organizations within the nonprofit sector are quite diverse in terms of their size, groups they serve, services they provide, and their overall organizational purpose. While I argue that the presence of nonprofits, as a general institutional type, should be associated with better quality of life outcomes in a locale, I also acknowledge that different types of organizations promise different benefits to the community as a whole and to groups within the community. How a given local nonprofit sector operates and the extent of its social impact is expected to be tied to its organizational structure – to the presence and abundance of different types of nonprofit organizations found within the community. Therefore, in each of my analyses I include several variables that are indicators of nonprofit sector composition. As a note, I ran a principle component factor analysis with varimax rotation to ascertain whether my measures – organizational diversity, evenness, and concentration – could be said to be measuring the same underlying concept, which I call nonprofit sector composition. Results confirm my assertions.

[42] I ran a principle component factor analysis with varimax rotation to ascertain whether my measures of small manufacturing, small retail, nonemployers (to be discussed shortly), and nonprofit organizations could be said to be measuring the same underlying concept, which I call civic institutions. Results confirm my assertions. The analysis yielded one factor, with an eigenvalue of 2.47 that accounted for 62% of the variance in these variables.

The analysis yielded one factor, with an eigenvalue of 1.87 that accounted for 62% of the variance in these variables.

Organizational Diversity. To measure organizational diversity, I constructed the NTEE Diversity Index, a measure of the number of organizational types present in a county. For the NTEE Diversity Index, nonprofits are categorized according to the *National Taxonomy of Exempt Entities* (*NTEE*) common codes -- which classifies nonprofits as one of the following 10 service areas: I.) Arts, Culture, and Humanities; II) Education; III) Environment; IV) Health; V) Human Services; VI) International, Foreign Affairs; VII) Public, Societal Benefit; VIII) Religion-Related; IX) Mutual and Membership Benefit; X) Unknown (organization other than 501(c)(3)). For the index, I exclude organizations captured under category VIII (since I exclude all religion related organizations from my analysis) and category X. Therefore, index scores can range from 0 (meaning no nonprofits present) to 8 (meaning the community has nonprofit organizations from all 8 measured service areas).

Organizational Evenness. While organizational diversity is a measure of how many types of nonprofit organizations are present in a community, organizational evenness refers to the distribution of organizations across service types. That is, organizational evenness is a measure of how evenly distributed organizations are in terms of the services they provide. Evenness is measured using the NTEE Evenness Index (analogous to the Simpson index used in ecology and the Herfindahl index used in economics) that reflects the county-level distribution of different types of organizations according to primary service area as categorized by the NTEE common codes. The measure takes into account the proportion of the sector comprised by each organizational type. The first step in the index construction is to sum the squared proportions; then 1 is subtracted from the sum and the difference is multiplied by -1. The second two steps

are done to facilitate interpretation of coefficients in my models. Without further modification, the index scores would range from 1/N to 1, where a score of 1/N indicates complete evenness and a score of 1 indicates that a sector was completely concentrated, or that only one type of nonprofit organizations was present. By subtracting by 1 and taking the negative of the difference, I reorder the index so that it ranges from 0 to (1/N-1)*-1 where lower scores are indicative of more concentrated sectors and higher scores are indicative of more evenly distributed sectors.

The formula can be written as:

$$E = ((\sum_{i=1}^{N} p_i^2) - 1)) * -1$$

Where p_i is the proportion of sector comprised of nonprofit organizations categorized under service area *i*, and *N* is the number of service areas present in the sector.

Organizational Concentration. Since I hypothesize that public benefit organizations should have a greater effect on wellbeing than member benefit organizations given the nature of their missions to provide a broad social or public benefit (and not a narrow member benefit), in my analyses, the sector is disaggregated accordingly (i.e., broken down into public-benefit and member-benefit organizations).[43] Public benefit organizations are operationalized as those discussed in IRC sections 501(c)3, 501(c)4, as well as 501(e) and 501(k); excluding mutual benefit public charities, which are considered as member benefit organizations.[44] Member

[43] I based categorizations upon the IRS stated descriptions of organizations and their activities. See Barnett and Thomas 2004; Frederick 2012; U.S. Department of Treasury, Internal Revenue Service 1979, 2011, 2012b for more information regarding IRS classification and treatment of tax-exempt organizations.

[44] Approximately 90% of organizations described in IRC subsection 501(c)(3) are considered either operating public charities (i.e., nonprofits organized for charitable purposes that directly engage in an activity that provides some broad public benefit) or supporting public charities (i.e., foundations or grant making organizations that distribute money to public charities). The other 10% are organizations that provide services to members. These are an "anomaly among public charities", and are not considered as public-interest organizations, but rather as membership associations or mutual-benefit organizations (Urban Institute, National Center for Charitable Statistics 2006).

benefit organizations are operationally defined as all other organizations represented in the BMF dataset.[45] My measure of organizational concentration is simply the percent of the sector comprised of public-benefit organizations. This measure reflects how concentrated a sector is in terms of these types of organizations.

Variable Specification: Civic Community Indicators

Locally oriented businesses

Using data from *County Business Patterns* and *Nonemployers Statistics*, I construct several measures of locally oriented businesses – number of small manufacturing enterprises per 10,000 residents, number of small retail enterprises and services per 10,000 residents, and number of nonemployers per 10,000 residents.[46] Small manufacturing and retail establishments are operationalized according to the North American Industrial Classification System (NAICS). Small manufacturing enterprises are those with a NAICS codes beginning with 31, 32, or 33 (which represent all manufacturing) and for which employment class size is either 1-4, 5-9, or 10-19 employees. Small retail and service enterprises are those with NAICS codes beginning with 44-45 (retail trade), 72 (accommodation and food services), or 811-812 (Other services, except public administration) and for which employment class size is either 1-4 or 5-9 employees.[47] Nonemployers are businesses with no employees (i.e., workers are self-employed or contract).

[45] See Chapter One for a discussion of operational definitions and Table A1 in Appendix A for a descriptive breakdown of nonprofit organizations.

[46] While the measures of small manufacturing and nonemployers are similar to those used in research (Lyson et al. 2001; Tolbert et al. 1998), the measure of small retail is not. I have no theoretical reason for making the cut-off 10 persons employed, except that manufacturing is possibly more labor-intensive than many retail services such that the latter should require a smaller number of employees. As a note, research conducted by Blanchard and Matthews (2006) that examines the influence of "non-locally oriented retailers", which in essence amounts to big-box stores such as Wal-Mart, employed a much larger threshold of 100 or more employees to designate large retail stores.

[47] Organizations in the "Other services" category excluded from the measure are those most likely to be nonprofit ; this includes religious, grant making, civic, professional, and similar organizations all categorized under NAICS codes beginning with 813. In addition, those categorized under NAICS codes beginning with 814 – private households, are also excluded.

Civically engaged denominations

In addition, as churches are said to contribute to civic community, and as local-religious characteristics are known to affect civic participation and social-wellbeing (Campbell 2004, Tolbert et al. 2002, Blanchard et al. 2008), I will do as Tolbert et al. (2002), suggest and, "follow the practice of including information on the percentage of religious adherents who identify with civically engaged denominations." Ideally, I would use those denominations identified by Tolbert et al. (1998) as civically engaging to construct the measure.[48] However, the dataset I use, RCMS, does not include all of the denominations cited as civically engaging.[49] Therefore, I use an alternative measure that has been employed in research on the relationship between the religious environment and civic and social wellbeing—the percent of the population in Mainline Protestant or Catholic denominations.[50]

Variable Specification: Community-Level Control Variables

In this analysis, several community-level control variables are employed to account for population composition and characteristics known to be associated with local wellbeing. Population controls are measured as percentages of the county population: (1) Race—percent

[48] The following denominations are those which have "an above average number of voluntary association memberships" (Tolbert et al. 1998: 425): African Methodist Episcopal Zion, Baptist, Congregational Christian, Church of Christ, Disciples of Christ, Episcopal, Jewish, Latter-Day Saints, Methodist, Presbyterian, and Unitarian.
[49] Tolbert et al. (1998) developed their measure of civically engaged denomination using *The 1990 Churches and Church Membership Study*, also known as the *Census of Churches*, which gathered information on churches, membership, and adherents from 132 religious groups. I rely on a parallel study, the *Religious Congregations and Membership Study*, conducted in 2000. Aside from the change in title (the title was changed to "better reflect the diversity of religious groups participating in the study" (Finke and Scheitele 2005: 7), the most notable difference in the studies is the difference in groups who participated (i.e., the sample). In contrast to the 1990 study, the 2000 study has no data on major African-American denominations, though it does contain data on a number of non-Christian groups. Important for the current investigation is the absence of data on the following denominations in the 2000 dataset: African Methodist Episcopal Church, African Methodist Episcopal Zion, Church of God in Christ, National Baptist Convention of America, National Baptist Convention (see Finke and Scheitele (2005) for a comprehensive discussion of the differences in the two studies).
[50] A divergence in the two constructs regarding the treatment of Catholic denominations deserves mention. While both include Mainline Protestant denominations as civically engaged, Tolbert et al.'s (1998) construction excludes the Catholic Church, which is seen as a highly bureaucratic institution that promotes ties among members but not to the community.

black; (2) Education—percent high school graduates; (3) employment status—percent unemployed. In addition to population characteristics, following Tolbert et al. (1998), I account for differences between rural and urban areas and church/religious characteristics known to affect social wellbeing. *Urban Influence Codes* (UIC) are included to control for the characteristics of urban and rural areas. The UIC typology takes county size, designation as metropolitan area, and access to metropolitan areas into account to highlight how geography affects social outcomes (USDA 2012). In this dissertation, the UIC measure is constructed as a series of dummy variables, where designation as a "large metro area (UIC 1)" is a reference variable omitted from statistical models. I also consider two measures of churches and the religious environment similar to those used in past research on civic communities—number of churches per county and adherence rate (number of adherents per capita) in a county.[51]

In addition to these controls, in analyses where health is the outcome of interest, I control for access to health care. With data from HRSA, I construct a measure of Health Professional Shortage Areas (HPSA).[52] HPSA designations for counties are largely based upon a population to physician ratio (typically 3,500: 1); counties designated as shortage areas do not have enough primary care physicians to fill the needs of the population. The measure of HPSAs employed in analyses is a dummy variable where a county is coded 1 if the whole county is designated as primary care HPSA and 0 if not. In Table 1, I present descriptive statistics for all variables included in analyses.

[51] According to Finke and Scheitele (2005) the Religious Congregations and Membership (RCMS) data are incomplete. Not all denominations participated in the study and a number of groups that did participate provided incomplete information on adherence. In addition, the authors note that these undercounts are not uniform across counties. While no corrections are made to my measure of churches per county, to account for data limitations I use the adjusted measure of adherence suggested by Finke and Scheitele that is incorporated into the RCMS database.
[52] According to HRSA (2012), "A HPSA is a geographic area, population group, or health care facility that has been designated by the Federal government as having a shortage of health professionals. There are three categories of HPSAs: primary care (shortage of primary care clinicians), dental (shortage of oral health professionals), and mental health (shortage of mental health professionals). HPSAs are designated using several criteria, including population-to-clinician ratios.

Table 1: Descriptive Statistics

VARIABLES	Mean/Percent	SD
OUTCOME VARIABLES		
Families in Poverty (percent of families below poverty line)	11.42%	5.71%
Median Household Income	43,218.94	11,218.91
Homicide count (number of homicides)	5.16	29.68
Homicide Rate (number of homicides per 100,000 residents)[53]	3.11	4.03
Infant deaths (number of infant deaths)	9.07	30.1
Infant mortality rate (number of infant deaths per 1,000 live births)[54]	7.09	4.06
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	47.50	26.96
Organizational diversity (NTEE diversity index)	7.16	1.01
Organizational evenness (NTEE evenness index)	0.77	0.05
Organizational concentration (percent public benefit)	61.44%	10.08%
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	625.92	197.69
Small retail (establishments per 10,000 residents)	339.94	148.02
Small manufacturing (establishments per 10,000 residents)	38.98	21.58
Percent in civically engaged denominations	44.7%	24.5%
CONTROL ITEMS		
Percent Hispanic	6.29%	12.28%
Percent Black	9.06%	15.54%
Percent unemployed	5.75%	2.64%
Percent with at least a high school education	51.44%	10.53%
Urban Influence		
Large metro area (reference)	12.9%	--
Small metro area	21.5%	--
Micropolitan adjacent to large metro area	3.0%	--
Noncore adjacent to large metro area	3.9%	--
Micropolitan adjacent to small metro area	9.7%	--
Noncore adjacent to small metro area, with town	11.5%	--
Noncore adjacent to small metro area, no town	5.9%	--
Micropolitan area not adjacent to a metro area	9.0%	--
Noncore adjacent to micro area, with town	6.5%	--
Noncore adjacent to micro area, no town	6.4%	--
Noncore not adjacent to metro/micro area, with town	4.2%	--
Noncore not adjacent to metro/micro area, no town	5.4%	--
Congregational density (congregations per 10,000 residents)	22.40	13.44
Adherence rate (adherents per capita)	63.8%	23.0%
Health Professional Shortage Area	24.1%	--

[53] In multivariate analyses, my dependent variable is the county homicide count. However, here I also provide the homicide rate because my model specification below allows me to interpret my dependent variable as a per capita crime rate, and using the rate per 100,000 residents facilitates interpretation, as it is a more commonly used measure.
[54] In multivariate analyses, my dependent variable is the infant death count. However, here I also provide the infant mortality rate because my model specification below allows me to interpret my dependent variable as a mortality rate, and using the rate per 1,000 live births facilitates interpretation, as it is a more commonly used measure.

Regarding dependent variables (community wellbeing outcomes), counties examined in analysis tend to exhibit moderate levels of economic affluence. The average county has a reported median household income of $43,219, and on average over one-tenth of families (11.4%) are according to federal standards living in poverty. In addition, on average counties exhibit very low rates of homicide and infant deaths – approximately 3.1 homicides were reported per 100,000 residents and 7 infant deaths were reported for every 1,000 live births.

Standard deviations for my civic community indicators including my primary explanatory variables, suggest that institutional structure varies a considerable amount across place. However, generally speaking, data suggest that nonprofits tend to be less concentrated in locales than are other types of civic institutions. On average counties contain approximately 626 nonemployers (self-employed or contract workers) 340 small retail establishments, and 39 small manufacturing establishments, as compared to 48 registered (secular) nonprofit organizations. The mean NTEE diversity index score indicates that on average, between seven and eight organizational service areas are represented in local nonprofit sectors. The mean NTEE evenness index score of .77 indicates that local nonprofit sectors tend to be relatively evenly distributed in terms of organizational types present; at the same time, the organizational concentration measure shows that a majority of nonprofits tend to be public benefit. In addition, on average nearly half (45%) of religious adherents in a county belong to civically engaged denominations.

Considering my county control items, the average unemployment rate of 5.8% for counties considered in analysis is relatively normal.[55] On average, slightly over half of county

[55] According to a 2002 report by the Congressional Budget Office (Brauer 2002), the natural rate of unemployment, which is a ten-year estimate of the rate of unemployment that is due to supply-side factors such as natural job turnover, jobs left vacant due to the absence of skilled workers, and institutional factors (but not due to changes in demand) was 5.2% for the period 2001-2010. The rate was slightly lower in the decade preceding.

residents have a least a high school education; approximately nine percent identify as Black, and six percent identify as Hispanic. In addition, on average nearly two-thirds of county residents reportedly are religious adherents. For all of these items standard deviations suggest a considerable degree of variation across counties. Data also indicate that nearly one-third (34.5%) of counties are metro areas with populations of at least 50,000 residents; slightly over one-fifth are micropolitan areas with between 10,000 and 50,000 residents, while a plurality of counties (43.9%) are noncore areas with fewer than 10,000 residents. Approximately one-quarter of counties are designated as Health Professional Shortage Areas.

CHAPTER 3: NONPROFITS, CIVIC COMMUNITY, AND ECONOMIC WELLBEING

Introduction

The fact that economic security is a primary component of both individual and community wellbeing is not to be debated. Due to its importance, at length researchers have worked to explain what separates individuals and communities that have adequate or abundant economic resources from those that do not. A great deal of this research has focused on explaining economic outcomes at the individual-level; it has shown both individual agency and social structure to be determinants of wellbeing. In addition, a burgeoning body of work examines how places differ in terms of the economic wellbeing of populations or residents. Researchers have found that even considering individual level factors known to be associated with economic outcomes, populations in some places are more likely than others to thrive economically and to be resistant to poverty. This research suggests that factors such as local economic policies, local institutional structures, and local levels of social cohesion can affect the overall economic wellbeing of a place.

Individual-Level Explanations of Economic Wellbeing

Research that examines individual-level economic wellbeing provides both agency-based and structural explanations for why some people have better economic outcomes than others. Scholars focusing on agency, most notably proponents of human capital and status attainment models of social stratification, have argued that the most important predictor of economic achievement is individual investment in human capital (resources that increase individual capacity) – especially skills and schooling that provide economic returns in job markets (Becker 1978; Blau and Duncan 1967; Featherman and Hauser 1976; Treiman 1976). From this perspective, investment in human capital is advantageous because the most highly educated and

skilled people usually make the most money, and the least educated are more likely to be unemployed.

Researchers taking more structural approaches highlight factors external to the individual (or at least over which the individual has no control) that affect not only the development of human capital but also differentials in expected returns on human capital for different groups of people. Such explanations emphasize how structural elements such as family background, gender and racial hierarchies, discrimination, and social networks serve as causal mechanisms explaining individual achievement and economic status. For instance, researchers have found that family characteristics, as well as economic and cultural resources available in the home during childhood, affect individual educational achievement and ultimately economic outcomes (Beeghley 1988; Bordieu 1986; Coleman 1988; Jencks 1972). Social capital and network theorists have provided evidence that social connections can be used to both find jobs and earn promotions, so that "who you know" can affect status attainment and economic wellbeing (Burt 1992; Granovetter 1973; Lin 1999a, 1999b; Lin, Vaughn, and Ensel 1981; Montgomery 1992). Other scholars have found that job attainment and promotion can be affected by the process of statistical discrimination by which physical and environmental attributes become linked to particular behavioral, cultural, and psychological attributes that employers believe are indicative of potential job performance (Feagin 1999; Massey 2007; Piore 1977; Reskin 2005). From this perspective, people who exhibit desirable traits are hired in the "best" firms, given the "good" jobs, and are more likely to be recommended for promotion (Baron 1984; England 2000; Piore 1977). Racial scholars have also argued that for Blacks especially, there is an intergenerational transmission of class position and poverty linked to inadequate local institutions—such as schools and hospitals—insufficient local labor markets, discriminatory economic and social

policies, and by resource bare social networks (Feagin 1999; Lichter and Johnston 2007; Lin 2000; Massey and Denton 1993; Wilson 1978, 1992). Taken together, this body of research indicates that individual-level economic outcomes are mediated by social structure as well as individually held social norms and values.

Civic Community and Place-Based Explanations of Economic Wellbeing

Because population characteristics, political policies, social resources, and economic opportunities vary across communities, place is also a significant determinant of social and economic wellbeing. Research indicates that at a place or community-level, differences in the types of industries and organizations present (Baron 1984; Lichter and McLaughlin 1995; Wilson 1978; 1987), the availability of jobs in local labor markets (Pebly and Sasstry 2003; Wilson 1978; 1987), aggregate levels of social capital and civic engagement (Putnam 1995, Tolbert et al. 1998; 2005) availability and quality of social institutions (Pebly and Sasstry 2004), and demographic characteristics of residents (Curtis, Voss, and Long 2012: Lichter and McLaughlin 1995; Wilson 1987; 1992) all work to determine "who gets what, where" (Lobao, Hooks, and Tickameyer 2007: 2). For instance, some place-based explanations of economic wellbeing suggest that the types of jobs available in a place often reflect the human and economic resources available in the population. Since "good jobs" that pay well, have good benefits, and opportunities for advancement tend to have more demanding skill, educational, and behavioral requirements (Beck, Horan and Tolbert 1978; Hodson and Kaufman 1982; Piore 1977), in order to attract and keep these jobs, places must have money, infrastructure, and adequate labor pools to support them. Ultimately, this means that good jobs tend to follow populations that have more human and economic resources (Wilson 1978; 1987). Conversely, research has shown that areas with high levels of poverty tend to have less educated residents

(Curtis, Voss, and Long 2012) and tend to support the types of businesses, such as service and extractive industries, that have high demand for low skill, low wage work (Wilson 1987, Lichter and McLauglin 1995).

The civic community perspective builds on such place-based research traditions. The civic community perspective holds that the institutional structure of place in great part determines the social and economic wellbeing of residents. Especially important for a locale is the development and support of locally oriented businesses and civically engaged institutions, which foster the development of local ties, increase community cohesion, and encourage the local orientation of residents (Lyson et al. 2001; Tolbert 1998; Tolbert 2005). More specifically, prior research has highlighted how a number of local business types – namely, small manufacturing (Tolbert 1998; Tolbert et al. 2002), family or small farming (Lyson et al. 2001; Tolbert et al. 2002), small retail or third places (Lyson et al. 2001; Tolbert 2005; Tolbert et al. 2002), and nonemployers (Tolbert et al. 2002) – as well as churches – especially civically engaged denominations (Lyson et al. 2001;Tolbert 1998; Tolbert et al. 2002) – are associated with lower levels of poverty and higher income in locales.[56,57]

Though the civic community perspective has provided insight into how local businesses and religious institutions can affect wellbeing, attention to and development of the understanding of the role of secular civically engaged institutions in promoting economic wellbeing has been minimal. In the analysis that follows, I expand on the civic community literature by investigating how nonprofit institutions conceptualized as both civically engaging and locally

[56] See footnote 5 for a brief explanation of the term *third places*.
[57] In the cited literature, the extent of association between civic community variables and economic wellbeing varies. For instance, in the study conducted by Tolbert et al. (2002), significance was largely mediated by a place's designation as a metro or non-metro small town. The only variable to perform as expected across place was presence of nonemployers – in both types of small towns, significant negative relationships were found between the number of nonemployers, similarly poverty and positive relationships were found between nonemployers and median income.

oriented organizations are related to economic wellbeing outcomes. I hypothesize that places with larger, more dense nonprofit sectors, those with proportionally more public benefit organizations, and those that are more diverse in terms of nonprofit services available will have higher levels of economic wellbeing, that is higher median income and lower levels of poverty. As tests of these expectations, I first present results of bivariate correlations between my dependent variables and independent variables of interest. I then present results of multivariate analysis methods that include other indicators of civic community and control for factors shown in research to affect economic wellbeing.

Analysis

Bivariate analysis

To begin my investigation I first perform bivariate correlations between my dependent variables and my independent variables of interest. The purpose is twofold. Examining the relationship between my nonprofit and economic wellbeing measures provides a very basic indication of the nature of the relationships between the two, and, it reveals whether a more detailed analysis that controls for factors known to influence wellbeing is warranted. Since I hypothesize that larger, more diverse nonprofit sectors, those with more even distribution of service organizations, and those with more organizations providing some public benefit will be associated with increased community economic wellbeing, I expect to see negative relationships between my measures of nonprofit sector size and composition and poverty. Likewise, I expect to see positive correlations between these measures and median family income. Table 2 below presents bivariate correlation statistics.

Table 2: Bivariate Correlations Between Nonprofit and Economic Wellbeing Indicators

	Family Poverty	Median Household Income
Organizational density (nonprofits per 10,000 residents)	-0.298***	0.004
Organizational diversity (diversity index)	-0.130***	0.265***
Organizational evenness (NTEE evenness index)	-0.025	0.108***
Organizational concentration (percent public benefit)	-0.102***	0.411***

Note: *** p<0.001, ** p<0.01, * p<0.05

Negative associations between poverty and nonprofit sector density (*r*= -.298), organizational diversity (*r*= -.130), evenness (*r*= -.025), and concentration (*r*= -.102) are as expected – findings are significant for all measures with the exception of organizational evenness. The opposite associations (correlation coefficients ranging from *r*=.004 to *r*=.411) between median household income and my nonprofit measures are also as expected – all observed correlations are significant except for that between income and organizational density. Taken together, as expected these findings suggest that places with larger nonprofit sectors relative to the population size, places with more diverse nonprofit sectors, places with proportionally more public-benefit organizations, and places in which organizational types are more equally represented (i.e., there are similar proportions of different types of nonprofits) have lower levels of poverty and higher median income. However, it should be noted that correlation coefficients also suggest that the observed relationships are relatively weak, in each case *r*<.45.[58]

Multivariate analysis

In this portion of my analysis, I examine the relationship between nonprofit organizations as components of civic communities and economic wellbeing, while controlling for a number of factors, detailed in Chapter Two, known to influence economic outcomes. It is my contention

[58] There are no universal thresholds for determining strength of relationship between two variables using a correlation coefficient. However, here I use the criteria established in Taylor (1990) which largely corresponds to what other authors suggest (for examples see Zelterman 2010, and Kutner, Nachtsheim, Neter, and Li 2005). Taylor's criteria are as follows: *r* <.45 is considered weak, =>.45<.68 moderate 68 <r<.9 strong, .9 and above very strong

that as sites and sources of civic engagement, nonprofit organizations should be positively associated with local quality of life when characteristics of place and population (such as aggregate measures of racial identity and educational attainment and county categorization along the rural-urban continuum) known to influence wellbeing are taken into account. More specifically, as is illustrated in Figure 1 below, I hypothesize that increases in organizational density, organizational diversity, organizational evenness and the organizational concentration will be correlated with lower poverty rates and higher median household income, even when possible mediating factors are taken into account.

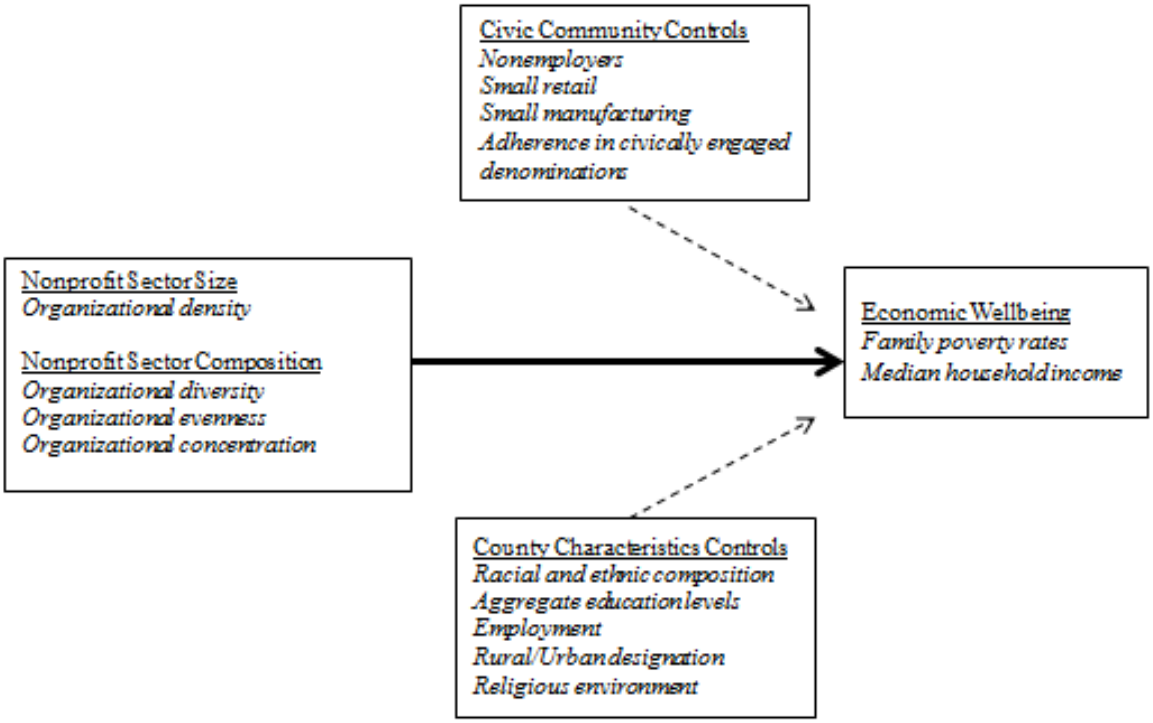

Figure 1: Civic Community and Economic Wellbeing Conceptual Diagram

As both my dependent variables – the percent of families in poverty and median income – are continuous, interval-level variables, ordinary least squares (OLS) regression serves as an appropriate inferential method to test my hypotheses. Diagnostic tests reveal that

multicollinearity is not a threat to either of my models.[59] Bivariate correlation statistics for my independent variables are all below .7 and variable inflation factors (VIFs) are all below 4.[60] However, tests also show a highly significant level of heteroskedasticity in both models.[61,62] In order to correct for high levels of heteroskedasticity, I transformed both my dependent variables by converting them to their natural logarithms. I chose to transform the variables in this way because both my measure of poverty and income are positively skewed and "the logarithm transformation of any variable will pull in large values and spread apart the low values," (Zelterman 2010: 134). The logarithm transformation brought variance in the error terms of the median household income model within normal ranges.[63] However, while reducing the problem in my poverty model, unequal variance is still higher than what is considered ideal.[64] Therefore, in my analysis of poverty I also employ the additional corrective of robust standard errors.[65] According to White (1980: 817), the advantage to using these estimates of standard error is that "even when heteroskedasticity cannot be completely eliminated, proper inferences can be drawn." The equation for both models is as follows

$$ln(Y_j) = \beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j \ldots +} \beta_k X_{kj} + \varepsilon$$

[59] Multicollinearity refers to the near perfect correlation between two or more independent variables in a statistical model. Multicollinearity is problematic because it is difficult to disentangle unique effects of variables that are highly correlated (Kutner, Nachtsheim, Neter, and Li 2005).

[60] There are no set thresholds for determining multicollinearity using either *r* or VIF scores; criteria are generally determined by the researcher. Here, I consider a correlation coefficient larger than *r*=.*9* as indicative of a very strong bivariate relationship (see footnote 58) and therefore symptomatic of a problem of multicollinearity. Also, I consider a VIF of greater than 10 to be indicative of a problem of association between the variables (Kutner, Nachtsheim, Neter, and Li 2005)

[61] Heteroskedasticity refers to unequal variance of error terms. This phenomena can occur for a number of reasons, including subpopulation differences (variances are different across groups within the same population) or model misspecification (Pesaran *N.d.*). Heteroskedasticity is problematic because it violates the OLS assumption of homoscedasticity (constant variance of error terms).

[62] STATA, which I use to conduct my analyses, performs three versions of Breusch-Pagan and Cook-Weisberg tests for heteroskedasticity. Results of tests of heteroskedasticity were highly significant for both my model of poverty (chi2=619.5; p<.0000) and median household income (chi2=533.2; p<.0000)

[63] Results of tests of heteroskedasticity were not significant (chi2=.17; p<.68)

[64] Results of tests of heteroskedasticity were highly significant (chi2=69.4; p<.0000)

[65] STATA, which I use to conduct my analyses, uses Huber-White sandwich estimators when estimating robust standard errors. Use of robust standard errors relaxes assumptions of OLS that errors have constant variance; that is they are that independent and identically distributed (Pesaran *N.d*; White 1980).

Where $ln(Y_j)$ refers to the natural log of the dependent variable (either percent of families in poverty or median household income) for observation *j;* β_0 refers to the intercept, or the value of the dependent variable when all other variables are equal to zero; β_k refers to the coefficient for variable X_k for observation *j*; it represents the expected change in the logged dependent variable ($(ln(Y_j))$for a one unit increase in the independent variable X_k., and ε is the error term, or unexplained variance.

OLS estimates of family poverty and median income are presented in Tables 3 and 4. For each variable included in the models, I present the model coefficient (*b*), the corresponding level of statistical significance (*p value*), designated by asterisks. In addition, in the columns entitled *percent change* and *standardized percent change* I present percent change statistics. These can be interpreted as the percent change that can be expected in Y (dependent variable) as a result of a one unit increase in X (independent variable), and the percent change that can be expected in Y as a result of a one standard deviation increase in X, respectively.[66]

I hypothesized that my measures of nonprofit sector size (organizational density) and sector composition (organizational diversity, evenness, and concentration) would be negatively associated with family poverty. Regarding poverty estimates presented in Table 3, as expected we observe statistically significant, negative relationships between poverty and my measures of organizational density and organizational concentration, when controlling for other county-level factors thought to influence poverty.

[66] Since the dependent variables have been converted to their natural logarithms, I can transpose the model equations (i.e., taking the exponent of both sides) so that the coefficients can be interpreted as the percent change expected in the dependent variable with a one unit or one standard deviation change in the independent variable, when all other variables are held constant (Institute for Digital Research and Education 2013; Lee and Bartowski 2004b; Long and Freese 2006) . The formulas for converting the raw coefficients are as follows

$(\exp(\beta_k)-1))*100$

$(\exp(\beta_k*sd_k)-1))*100$

Where β_k is the raw coefficient from the OLS equation, and sd_k is the standard deviation of the independent variable.

Table 3: OLS Regression of Poverty

VARIABLES	*b*	β	Percent change	Standardized percent change
NONPROFIT SECTOR INDICATORS				
Organizational density (nonprofits per 10,000 residents)	-0.0010 *	-0.05	-0.1%	-2.7%
Organizational diversity (NTEE diversity index)	0.0300 **	0.06	3.0%	3.1%
Organizational evenness (NTEE evenness index)	0.0375	0.00	3.7%	0.2%
Organizational concentration (percent public benefit)	-0.0020 *	-0.04	-0.2%	-2.0%
CIVIC COMMUNITY INDICATORS				
Nonemployers (establishments per 10,000 residents)	-0.0002 **	-0.07	0.0%	-3.4%
Small retail (establishments per 10,000 residents)	0.0000	-0.01	0.0%	-0.5%
Small manufacturing (establishments per 10,000 residents)	0.0003	0.01	0.0%	0.6%
Percent in civically engaged denominations	-0.0045 ***	-0.22	-0.4%	-10.4%
CONTROL ITEMS				
Percent unemployed	0.0684 ***	0.46	7.1%	19.8%
Percent Hispanic	0.0063 ***	0.16	0.6%	8.1%
Percent Black	0.0061 ***	0.19	0.6%	10.0%
Percent with at least a high school education	-0.0078 ***	-0.16	-0.8%	-7.9%
Urban Influence (Large metro reference)				
Small metro area	0.1890 ***	0.16	20.8%	
Micropolitan adjacent to large metro area	0.2610 ***	0.09	29.8%	
Noncore adjacent to large metro area	0.2480 ***	0.10	28.1%	
Micropolitan adjacent to small metro area	0.2560 ***	0.15	29.2%	
Noncore adjacent to small metro area, with town	0.2420 ***	0.16	27.4%	
Noncore adjacent to small metro area, no town	0.2350 ***	0.11	26.5%	
Micropolitan area not adjacent to a metro area	0.2400 ***	0.14	27.1%	
Noncore adjacent to micro area, with town	0.2470 ***	0.12	28.0%	
Noncore adjacent to micro area, no town	0.2850 ***	0.14	33.0%	
Noncore not adjacent to metro/micro area, with town	0.2750 ***	0.11	31.7%	
Noncore not adjacent to metro/micro area, no town	0.4230 ***	0.15	38.1%	
Congregational density (congregations per 10,000 residents)	0.0078 ***	0.21	0.8%	10.9%
Adherence rate (adherents per capita)	-0.0793 *	-0.04	-7.6%	-1.8%
Constant	2.171 ***			
Observations	3,058			
Adjusted R-squared	0.621			

Note: *** p<0.001, ** p<0.01, * p<0.05

Table 4: OLS Regression of Median Household Income

VARIABLES	b	β	Percent change	Standardized percent change
NONPROFIT SECTOR INDICATORS				
Organizational density (nonprofits per 10,000 residents)	0.0001	0.01	0.0%	0.1%
Organizational diversity (diversity index)	-0.0033	-0.01	-0.4%	-0.4%
Organizational evenness (NTEE evenness index)	0.0276	0.01	2.7%	0.1%
Organizational concentration (percent public benefit)	0.0017 ***	0.07	0.2%	1.7%
CIVIC COMMUNITY INDICATORS				
Nonemployers (establishments per 10,000 residents)	0.0001 ***	0.11	0.01%	2.6%
Small retail (establishments per 10,000 residents)	0.0000	-0.03	0.0%	-0.6%
Small manufacturing (establishments per 10,000 residents)	-0.0005 ***	-0.04	0.0%	-1.0%
Percent in civically engaged denominations	0.0016 ***	0.16	0.2%	4.0%
CONTROL ITEMS				
Percent unemployed	-0.0276 ***	-0.40	-2.7%	-7.0%
Percent Hispanic	-0.0007 **	-0.04	-0.1%	-0.9%
Percent Black	-0.0024 ***	-0.15	-0.2%	-3.6%
Percent with at least a high school education	0.0035 ***	0.15	0.4%	3.8%
Urban Influence (Large metro reference)				
Small metro area	-0.1440 ***	-0.24	-13.4%	-5.7%
Micropolitan adjacent to large metro area	-0.1870 ***	-0.13	-17.1%	-3.1%
Noncore adjacent to large metro area	-0.1900 ***	-0.15	-17.4%	-3.6%
Micropolitan adjacent to small metro area	-0.2160 ***	-0.26	-19.4%	-6.2%
Noncore adjacent to small metro area, with town	-0.2380 ***	-0.41	-21.2%	-7.4%
Noncore adjacent to small metro area, no town	-0.2140 ***	-0.21	-19.4%	-4.9%
Micropolitan area not adjacent to a metro area	-0.2350 ***	-0.28	-20.9%	-6.5%
Noncore adjacent to micro area, with town	-0.2580 ***	-0.26	-22.7%	-6.2%
Noncore adjacent to micro area, no town	-0.2590 ***	-0.26	-22.8%	-6.1%
Noncore not adjacent to metro/micro area, with town	-0.2510 ***	-0.21	-22.2%	-4.9%
Noncore not adjacent to metro/micro area, no town	-0.2870 ***	-0.27	-24.9%	-6.4%
Congregational density (congregations per 10,000 residents)	-0.0058 ***	-0.42	-0.6%	-7.4%
Adherence rate (adherents per capita)	0.0650 ***	0.06	6.7%	1.5%
Constant	10.72 ***			
Observations	3,065			
Adjusted R-squared	0.677			

Note: *** p<0.001, ** p<0.01, * p<0.05

As hypothesized, these findings suggest as organizational density and the proportion of the sector comprised of public benefit organizations increase, family poverty decreases. More specifically, percent change statistics indicate that for every additional nonprofit organization (per 10,000 residents) there is a .1% decrease in the percent of families in poverty; an increase of one standard deviation is associated with a 2.7% decrease in poverty. Results also show that for every 1% increase in public benefit organizations in a sector, there is a .2% decrease in family poverty; a one standard deviation increase results in a 2% decrease in the percentage of families living in poverty. Against expectations, there is a significant and positive relationship between organizational diversity and poverty; such that with a one unit (and one standard deviation) increase in diversity (i.e., for every extra organizational type present), there is a 3% increase in the percent of families living in poverty. No association between my measure of organizational evenness (NTEE evenness index) and poverty is evident.

Considering other variables included in the model, two of the four civic community variables performed as expected. Both nonemployers and adherence in civic denominations are significantly and negatively related to poverty, suggesting that places with more nonemployers (or self-employed persons) and with higher percentages of religious adherents belonging to civically engaging denominations have lower levels of poverty. Results of the model indicate that a one standard deviation increase in civically engaged adherents corresponds to more than a 10% decrease in poverty, while a one standard deviation increase in the number of nonemployers per 10,000 residents is associated with a 3.4% decrease in poverty. No relationships are evident between poverty and small retail and small manufacturing.

With the exception of my measure of religious adherents per capita (i.e., the adherence rate), all control variables are found to be statistically significant. As county unemployment

increases, as the percent of the population that is Black and percent of the population that is Hispanic increases, and as congregational density increases so does poverty. Conversely, aggregate increases in educational attainment result in decreased poverty. As compared to other areas, large metro areas have lower levels of family poverty when all other factors are held constant.

Though the relationships between poverty and nonprofit sector size, diversity, and organizational concentration are significant, standardized coefficients between 0.04 and 0.06 indicate the associations are weak, especially as compared to many of the other variables included in analysis. By contrast, unemployment has the strongest association with poverty, a one standard deviation increase in unemployment results in a .46 increase in the logged family poverty rate. The adjusted R-squared of .621, suggests that the model explains approximately 62% of the variance associated with logged family poverty.

Turning to findings presented in Table 4, I hypothesized that my measures of nonprofit sector size (organizational density) and sector composition (organizational diversity, evenness, and concentration) would be positively associated with median household income. Results of my regression model indicate that the expected relationship exists between median household income and only one of my primary variables of interest, organizational concentration. Results suggest that for every one unit (in this case, one percent) increase in public benefit organizations in a sector, there is a .2% increase in median household income; a one standard deviation increase is associated with a nearly 2% increase in income. No relationship is apparent between my other nonprofit sector measures (sector density, diversity, or evenness) and income.

Regarding my civic community measures, the number of nonemployers (per 10,000 residents) and adherence in civically engaged denominations are both positively associated with

median household income. For every additional nonemployer in a locale, the median income increases by 0.01%; a one standard deviation increase results in a 2.6% increase in income. A one unit, or one percent, increase in religious adherents in civically engaged denominations is associated with a .2% increase in median income; a one standard deviation increase in my measure of civically engaged adherents corresponds to a 4% increase in median income.

Results for my measures of small retail and small manufacturing run counter to expectations; both are negatively associated with median household income. However, only the small manufacturing measure is statistically significant. Results of the model suggest that as the number of small manufacturing establishments increase, median household income decreases. More specifically, a one standard deviation increase in small manufacturing establishments (which translates to an increase of 22 establishments per 10,000 residents) is linked to a 1% decrease in median household income.

Results for my county-level control variables are comparable to those reported for poverty. Educational attainment is positively associated with income, whereas unemployment, the concentration of racial and ethnic minority populations, living in a place other than a large metro area, and congregational density are all negatively associated with income. A notable difference is that the percent of the population claiming to be religious adherents (of any denomination) is significantly and positively linked to median income – a one standard deviation increase in the adherence rate is associated with a 1.5% increase in median income.

Similar to my model of poverty, standardized coefficients suggest that as compared to many other variables included in the model, the relationship between logged median income and organizational concentration, is relatively weak – the standardized coefficient (.07) is among the lowest reported (for statistically significant relationships). The strongest relationships appear to

be between median income and a) congregational density (*B*= -.42), b) urban influence (*B* ranges from -.13 to -.42), and c) unemployment (*B*=.40). The adjusted R-squared (.68) suggests that taken together, the variables in the model explain approximately 68% of the variance associated with logged median household income.

Summary

In this chapter, I build on prior research by examining the relationship between nonprofit organizations, conceived as civically engaged and locally oriented institutions, and economic wellbeing. Scholarship indicates that places considered to be civic communities (those with relatively high numbers of locally oriented businesses and civically engaging institutions) tend have lower levels of poverty and higher median income (Lyson et al. 2001; Tolbert 1998; Tolbert 2005; Tolbert et al. 2002; Tolbert 2005). Following this research, the goal of this section was to test my hypotheses that a) larger sectors, b) more diverse sectors, c) sectors in which organizations are more evenly spread across service areas, and d) sectors in which there are higher concentrations of public benefit organizations have lower levels of poverty and higher median income.

Bivariate analyses largely support hypothesized relationships. Without considering potential mediating factors, I find better community-level economic outcomes (lower poverty and higher income) in places with more nonprofits (per 10,000 residents), places with more organizational diversity, places where nonprofits are more evenly spread across service areas, and places where there are higher concentrations of public benefit organizations. Results of my multivariate analyses, which control for other potentially influential variables, though less robust than my bivariate analyses also lend support to my hypotheses that the size and composition of local nonprofit sectors are related to local levels of wellbeing. More specifically, results from

my OLS regression models indicate that when all other variables are held constant, larger sectors and those with higher concentrations of public benefit organizations have lower levels of family poverty. Findings also reveal that places with proportionally more public benefit organizations have higher median household income. Against expectations, results suggest that places where sectors are more diverse have higher levels of poverty. In addition, no relationships are evident between organizational density, organizational diversity, and income, nor is there support for my hypothesis that organizational evenness is positively linked to economic wellbeing.[67] Taken together, though findings indicate that there exists a positive relationship between nonprofit organizations and community wellbeing; the mixed nature of the results makes evident the need for more research into the role of nonprofits in the making of civic communities and into the causal mechanisms that explain observed relationships.

[67] These findings are largely confirmed with sensitivity analyses performed using only data updated by NCCS (see Tables B1 and B2 in Appendix B for results). The only substantive difference between the two analyses is that the relationship between organizational density and economic wellbeing are more robust when using the NCCS dataset. That is, organizational density is shown to be positively and significantly associated with income and negatively associated with poverty.

CHAPTER 4: NONPROFITS, CIVIC COMMUNITY, AND CRIME

Introduction

Crime in the United States has deleterious personal, social, and economic effects. According to Fajnzylber et al. (2000), in 1992 financial losses and expenditures associated with crime in the U.S. were estimated to cost $425 billion annually, approximately 5% of the nation's GDP. Moreover, research has shown there to be clear social impacts of crime, especially for minority groups. For instance, research has shown that that Black males are more likely to be victims of homicide, which leads to a lower life expectancy for this group (Fox et al. 2005; Keith and Smith 1988; South and Messner 2000). Similarly, research has also shown that increased rates of homicide victimization and incarceration among Black males lead to increased numbers of female-headed households and decreased marriage rates (spurred by fewer marriages and more divorces) in Black or African American communities (Lichter et al. 1991; Lynch and Sabol 2004; South and Messner 2000; Western 2004). At an individual level, crime is known to have physical, material, and social consequences for those victimized. For instance, research on victimization has shown that as compared to non-victims, adolescents who are victims of crime have reduced educational, career, and ultimately economic achievements later in the life course; they are also more likely to become offenders themselves (MacMillan 2001). Other research has found that not only can crime directly result in property loss or physical harm, the stress that is caused from victimization can also manifest itself in poorer physical health (Jackman 2002). Due to its immense economic and social costs, crime, especially violent crime, has long been a prominent area of investigation in the social sciences.

Correlates of Crime

According to Blau and Blau (1982), "Two questions must be clearly distinguished in the study of crime. To ask why certain individuals have tendencies to commit violent crimes…[and] to ask why rates of criminal violence differ from place to place or time to time…." In response to the first question, research has found that personal attributes, such as age, race, gender, and education level, as well as an individual's environmental context, including family relationships and residential neighborhood, are all important predictors of criminal behavior. For instance, some evidence suggests that individuals are most likely to engage in criminal activity, namely property and violent crime, towards the end of adolescence, between the ages of 16 and 19 (MacMillan 2001; Sampson and Laub 1992). Furthermore, research shows that adolescents who reside in neighborhoods that have in place mechanisms that adequately supervise and control youth are less likely to become the perpetrators of crime (Coleman 1988; Pebley and Sastry 2004; Portes 1998). Evidence also indicates that males, especially African American or Black males, and those with lower educational attainment are at greater risk of becoming violent offenders (Fajnzylber et al. 2000; Fajnzylber et al. 2002; Fox et al. 2005).

Regarding the second question, research has found that the aggregate characteristics of populations, social and political policies, as well as institutional structures and economic processes all help to explain variance in crime rates across locales. Much of the work done in this vein attempts to explain why some places or areas have higher crime rates than others; a number of factors that help to explain higher crime rates have been identified. For instance, a number of studies have found positive correlations between the size and concentration (in terms of residential segregation and heterogeneity) of minority populations in a community and crime; places with larger proportions of minorities, with larger numbers of minority groups, and with

minority populations that are residentially segregated tend to have higher rates of crime (Blau and Blau 1982; Hipp 2007; Hipp 2010). Building on these findings, researchers have argued that social mechanisms such as urbanization, deindustrialization, discrimination, and inequality are at the root of higher crime rates in minority populations (Blau and Blau 1982; Massey and Denton 1993; Wilson 1987; Wilson 1996).

Another line of research investigates, not what leads to higher rates of crime, but what factors buffer communities from crime and its negative effects. Research done on civic communities falls under this model of social investigation. Places deemed civic communities are characterized by relatively dense networks of locally oriented businesses and civically engaged institutions and in turn relatively high levels of civic engagement among community members and business owners (Lee 2008; Lee and Thomas 2010; Tolbert 1998; Tolbert 2005). Civic community scholars suggest that because civic institutions provide opportunities for association and civic involvement, residents and business owners tend to be more invested in the welfare of the community and its residents, which leads to better quality of life outcomes for the community (Lee 2008; Tolbert 1998; Tolbert 2005). Research on civic community and violent crime has largely bolstered these claims. In particular, the presence of small retail establishments (Tolbert 2005) local capitalism and the presence of a civically engaged middle class (Lee 2008; Lyson et al. 2001), the presence of civic denominations (Lee and Bartowski 2004b), higher levels of civic engagement (Lee 2008; Tolbert 2005), and higher levels of residential stability (Lee 2008) have been shown to be salient predictors of lower violent crime rates.

In the analysis that follows, I expand on the civic community literature by investigating how nonprofit institutions conceptualized as both civically engaging and locally oriented organizations are associated with crime in communities. I hypothesize that places with larger,

more dense nonprofit sectors, those with proportionally more public benefit organizations, and those that are more diverse in terms of nonprofit services available will have lower levels of crime, specifically lower homicide rates. As tests of these expectations, I first present results of bivariate correlations between my dependent variables and independent variables of interest. I then present results of multivariate analysis that take into account other indicators of civic community and control for factors shown in research to affect crime.

Analysis

Bivariate analysis

The first step in my analysis was to run bivariate correlations between my primary variables of interest and the homicide rate.[68] The purpose of the analysis is to assess the extent to which relationships exist between my nonprofit variables of interest and crime and whether there is support for my hypotheses. Since I hypothesize that places with larger, more diverse nonprofit sectors, those with more even distribution of service organizations, and those with more organizations providing some public benefit will have higher levels of wellbeing, I expect the relationships between my nonprofit variables and the homicide rate to be negative. Table 5 below presents bivariate correlation statistics.

Table 5: Bivariate Correlations Between Nonprofit and Crime Indicators

	Homicide Rate (homicides per 100,000 residents)
Organizational density (nonprofits per 10,000 residents)	-0.127***
Organizational diversity (diversity index)	0.132***
Organizational evenness (NTEE evenness index)	0.090***
Organizational concentration (percent public benefit)	0.193***

Note: *** p<0.001, ** p<0.01, * p<0.05

[68] In multivariate analyses, my dependent variable is the county homicide count. However, here I use the homicide rate homicide rate (per100,000 residents) for two reasons: 1) my model specification below allows me to interpret my dependent variable as a per capita crime rate, and 2) using the rate per 100,000 residents facilitates interpretation as it is a more commonly used measure of crime.

Results presented in Table 5 indicate there is mixed support for my expectations concerning the relationship between nonprofit sector size and structure and community crime levels. The negative association observed between organizational density and the homicide rate (r=-.13), supports my hypothesis that locales with larger, more diverse nonprofit sectors have lower rates of homicide. Conversely, the positive association observed between the homicide rate and my measures of organizational diversity (r=.13), evenness (r=.09), and organizational concentration (r=.19) indicate that more diverse sectors, those in which organizations are more evenly spread across service areas, and those with larger proportions of public benefit organizations have higher crime rates; these findings are against expectations. The correlation coefficients for each observed relationship is highly significant ($p<.001$); however the strength of the relationships observed is weak.[69]

Multivariate analysis

In this portion of my analysis, I examine the relationship between nonprofit organizations as components of civic communities and crime, while controlling for a number of factors, detailed in Chapter Two, known to affect community crime rates. It is my contention that as sites and sources of civic engagement, nonprofit organizations should be positively associated with local quality of life when characteristics of place and population (such as aggregate measures of racial identity and educational attainment and county categorization along the rural-urban continuum) known to influence wellbeing are taken into account. More specifically, as is illustrated in Figure 2 below, I hypothesize that increases in organizational density, organizational diversity, organizational evenness and the organizational concentration will be correlated with lower homicide rates even when possible mediating factors are taken into account.

[69] See footnote 58 for a brief discussion of strength of correlation coefficients.

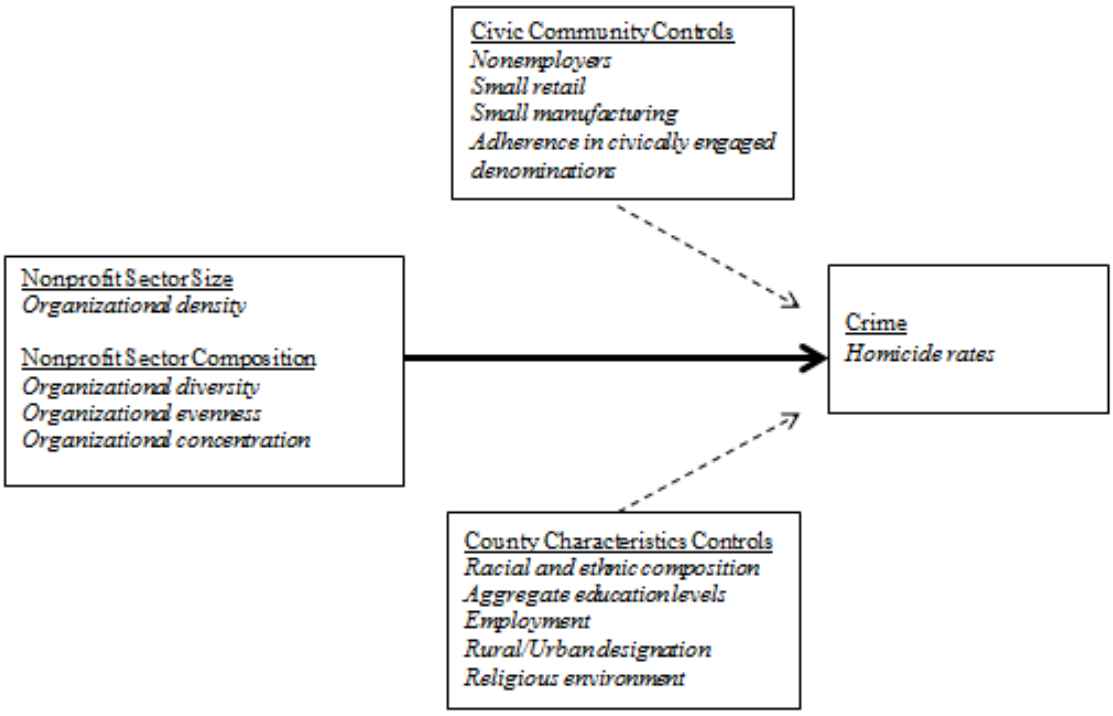

Figure 2: Civic Community and Crime Conceptual Diagram

Because homicide is a discrete and rare event and homicide rates are relative to the population size (i.e., for the same number of offenses, the rate will be higher where population size is small and lower where population size is large), homicide data are not suitable for least squares regression models in which a normal distribution of outcome variables and constant variance of error terms is assumed (Osgood 2000). Therefore, following Osgood's (2000) recommendation, in the models below I use Poisson-based estimation techniques in my analysis of the relationship between crime and nonprofit civic community variables. Because my data do not meet the equidispersion criterion of the Poisson distribution (i.e., that the variance is equal to the mean), I use the negative binomial regression model, a variant of the basic Poisson regression model that allows for unobserved variance with the inclusion of an error term (Long and Freese

2006; Osgood 2000).[70] In addition, since the rate of homicide is related to population size, following the convention in the literature (for recent examples see Lee 2008; Lee and Bartowski 2004a, and Lee and Thomas 2010), I include the natural log of the population as an offset variable thereby controlling for its effect. Including a variable as an offset constrains the coefficient for the variable to 1; therefore, the inclusion of the logged value of the population effectively allows me to interpret my dependent variable as a per capita homicide rate (Osgood 2000).[71]

Below, I present my negative binomial regression model in which I regress my dependent variable, crime rate, on the vector of variables that includes the nonprofit, civic community, and control variables discussed in Chapter 2. The equation for the model is as follows

$$Y_j / p_j = e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj})\varepsilon$$

Where Y_j refers to the value of the dependent variable (crime) for observation *j; p* refers to the population size of observation *j*; β_0 refers to the intercept, or the value of the dependent variable when all other variables are equal to zero; β_k refers to the coefficient for variable X_k for observation *j*; since it is exponentiated, it represents the expected percent change in the crime rate (Y_j / p_j) for a one unit increase in the independent variable X_k., and ε is the error term, or unexplained variance.

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[70] The likelihood-ratio test of alpha=0 indicates that my data are overdispersed, chibar2(01)=1927.2, sig=0.000.

[71] The negative binomial regression model is a log linear model for which the natural log of the expected value of the dependent variable is assumed to be equal to the sum of the products of the explanatory variables plus an error term that takes into account unexplained variance. Since, like many count variables, there are observations with the value 0 (and the ln(0) is undefined) we exponentiate the equation; the formal formula can be written as follows

$$Y= e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj})\varepsilon$$

Furthermore, since I want to specify the variable as a homicide rate in order to take into account the effect of population size, I add in the natural log of the population to the right hand of the equation as an offset variable, constraining the coefficient to 1. Therefore the equation becomes

$$Y=e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj} + \ln p)\varepsilon$$

Translated using the laws of exponents and logarithms (i.e., $e^m * e^n = e^{m+n}$; $\ln(e^p)=p$) we get

$$Y=e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj})\varepsilon * e(\ln p)$$
$$= e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj})\varepsilon * p$$
$$= e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j\ldots+} \beta_k X_{kj})\varepsilon = Y/p$$

In the process of specifying my model, I ran diagnostic tests to determine whether the inclusion of any of my variables was problematic. Diagnostic tests did not reveal a problem of association or multicollinearity between my independent variables.[72] Bivariate correlations reveal no problematic association between any two of my variables; in no case was $r>.7$. Furthermore, I also examined my models using OLS regression so that I could obtain variance inflation factors (VIF) for all variables in the model. This diagnostic also indicates no problems of association between my variables, no VIF was above 4, and the mean VIF was 2.12. [73]

Table 6 presents the results of my negative binomial regression model predicting county homicide rates. I present the model coefficient (*b*) and the corresponding level of statistical significance. In addition, I provide two transformed coefficients in order to ease interpretation of results. In the column with the heading *percent change*, the coefficient can be interpreted as the percent change in expected homicide rate for a one-unit increase in X (the independent variable).[74] In the column labeled *standardized percent change*, the coefficients represent the percent change in the expected homicide rate for a one standard deviation increase in X.[75]

I hypothesized that my measures of nonprofit sector size (organizational density) and sector composition (organizational diversity, evenness, and concentration) would be negatively associated with the homicide rate. Results in Table 6 show that there are significant relationships between homicide and each of my primary explanatory variables; however, the positive direction of these relationships is not as expected.

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[72] See footnote 59 for a brief discussion of the problem of multicollinearity.
[73] See footnote 58 and 60 for a brief discussion of rationale for determining if multicollinearity is problematic.
[74] The following formula can be applied to the raw coefficient so that it may be interpreted as the percent change in the expected rate (see footnote 66):

$$(\exp(\beta_k)-1))*100$$

[75] The following formula can be applied to the raw coefficient so that it may be interpreted as the percent change in the expected rate for a one standard deviation increase in the variable (see footnote 66): :

$$(\exp(\beta_k*sd_k)-1))*100$$

Where β_k is the raw coefficient from the negative binomial equation, and sd_k is the standard deviation of the independent variable.

Table 6: Negative Binomial Regression of Homicide

VARIABLES	*b*	Percent change	Standardized percent change
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	0.0058 ***	0.6%	17.1%
Organizational diversity (diversity index)	0.1070 **	11.4%	11.4%
Organizational evenness (NTEE evenness index)	1.5540 *	78.9%	7.9%
Organizational concentration (percent public benefit)	0.0192 ***	1.9%	21.4%
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	-0.0005 **	-0.1%	-9.9%
Small retail (establishments per 10,000 residents)	0.0004	0.0%	6.1%
Small manufacturing (establishments per 10,000 residents)	-0.0038 **	-0.4%	-7.8%
Percent in civically engaged denominations	-0.0077 ***	-0.8%	-17.2%
CONTROL ITEMS			
Median household income	0.0000 ***	0.0%	-21.4%
Percent unemployed	0.0044	0.4%	1.2%
Percent Hispanic	0.0102 ***	1.0%	13.4%
Percent Black	0.0170 ***	1.7%	30.2%
Percent with at least a high school education	-0.0041	-0.4%	-4.2%
Urban Influence (Large metro reference)			
Small metro area	-0.1930 ***	-17.6%	
Micropolitan adjacent to large metro area	-0.4400 **	-28.8%	
Noncore adjacent to large metro area	-0.2590	-22.8%	
Micropolitan adjacent to small metro area	-0.4000 ***	-33.0%	
Noncore adjacent to small metro area, with town	-0.4920 ***	-32.4%	
Noncore adjacent to small metro area, no town	-0.4200	-27.4%	
Micropolitan area not adjacent to a metro area	-0.4920 ***	-38.9%	
Noncore adjacent to micro area, with town	-0.4040 **	-33.2%	
Noncore adjacent to micro area, no town	-0.4120	-33.8%	
Noncore not adjacent to metro/micro area, with town	-0.5070 **	-39.8%	
Noncore not adjacent to metro/micro area, no town	-0.2480	-22.0%	
Congregational density (congregations per 10,000 residents)	-0.0207 ***	-2.0%	-24.1%
Adherence rate (adherents per capita)	0.1430	15.4%	3.4%
Constant	-10.23 ***		
Observations	3,065		
Likelihood ratio chi-square	1115.89 ***		
Pseudo R squared	0.1229		

Note: *** p<0.001, ** p<0.01, * p<0.05

More specifically, percent change statistics indicate that one standard deviation increases in organizational density, organizational diversity, organizational evenness, and organizational concentration are associated with increases in the per capita homicide rate of 17%, 11%, 8% and 21%, respectively. Substantively, what these findings suggest is though I expected that my nonprofit measures would be associated with increased community wellbeing, they are, at least in the case of community safety and crime, associated with lower levels of wellbeing; that is, locales with larger and more diverse nonprofit sectors and those with higher concentrations of public benefit organizations tend to have *higher* crime rates.

Regarding other aspects of civic communities, three of my four measures of civic community – nonemployers, small manufacturing, and civic denominations -- are statistically significant and in the expected direction. As the number of nonemployers and small manufactures per 10,000 residents, and as the percent of adherents belonging to civically engaged denominations increase, the homicide rate decreases.

Concerning my control variables, there are significant, positive relationships between the county homicide rate and the percent of the population that identifies as Black or African American and the percent of the population that is Hispanic. Significant negative relationships exist between the percent of the population that has at least 12 years of school and median household income. These findings support previous research that has found that places with higher concentrations of minority populations, lower median household income, and lower levels of educational attainment have higher crime rates. In addition, the largely significant and negative relationships seen with my measures of the rural-urban continuum suggest that large metro areas have higher rates of crime as compared smaller metro, micropolitan and rural areas.

The Pseudo R squared suggests that when all variables are included in the models, there is a .12 (12%) improvement over the null model (or constant only model). The significant likelihood ratio chi-square (chi2=1115.89; p<.000) confirms that as a whole, the variables in the model have an effect or are significantly associated with the outcome variable (homicide rate). However, unlike with the R squared reported in OLS regression models, neither provides an indication of the variance explained by the model.

Summary

In this chapter, I build on prior research by examining the relationship between nonprofit organizations, conceived as civically engaged and locally oriented institutions, and community safety or crime. Scholarship indicates that places considered to be civic communities (those with relatively high numbers of locally oriented businesses and civically engaging institutions) tend have less incidence of violent crime such as homicide (Lee and Bartowski 2004b; Lee 2008; Lee and Thomas 2010; Lyson et al. 2001; Tolbert 2005). Following this research, the goal of this section was to test my hypotheses that a) larger sectors, b) more diverse sectors, c) sectors in which organizations are more evenly spread across service areas, and d) sectors in which there are higher concentrations of public benefit organizations have lower crime rates.

My findings do not support my hypotheses that places with large and diverse nonprofit sectors, and sectors with larger concentrations of public-benefit organizations should have lower homicide rates. Instead, both bivariate and multivariate analyses show that my nonprofit variables of interest are actually significantly associated with higher homicide rates.[76] These results are especially surprising given that sensitivity analyses suggest that my measure of nonprofit organizational density is tapping into the same underlying construct as my other

[76] These findings are largely confirmed with sensitivity analyses performed using only data updated by NCCS (results presented in Table B3 of Appendix B). The only substantive difference between the two analyses is that no relationship is evident between organizational evenness and crime in the NCCS updated model.

measures of civic institutions (small manufacturing, small retail, and nonemployers), and these measures are for the most part shown to be negatively associated with homicide.[77]

I believe that one plausible reason results are not as expected is that my models do not examine the configuration of nonprofits within communities and therefore they miss possible neighborhood-effects that influence results. That is my model does not take into account the possibility that it is not just the size or composition of the sector that matters, but also the ways in which organizations are distributed within a community. Past research on nonprofits shows that nonprofit organizations are not evenly distributed across or within place. Research has shown that at the neighborhood level, the most disadvantaged areas often have the least support for and presence of nonprofit organizations (Beilefeld 2000; Fyfe and Milligan 2003; Gronbjerg and Paarlberg 2001). Since crime research has shown that where organizational density (especially of smaller organizations) is higher, crime is generally lower (Sampson, Morenoff, and Earls 1999), we should expect higher rates of crime in disadvantaged neighborhoods that are resource bare and that cannot support the institutional infrastructure that might buffer residents against the adverse effects of poverty (Wilson 1986; 1996). In other words, the unexpected results of my model could be an artifact of an uneven distribution of nonprofits (institutional resources) and crime within communities. These findings reveal a need to more deeply understand the relationship between nonprofit organizations and other types of civic institutions as well as the causal mechanisms that potentially explain the relationship observed between nonprofit organizations and crime.

[77] I ran a principle component factor analysis with varimax rotation to ascertain whether my measures of small manufacturing, small retail, nonemployers, and nonprofit organizations could be said to be measuring the same underlying concept, which I call civic institutions. Results confirm my assertions. The analysis yielded one factor, with an eigenvalue of 2.47 that accounted for 62% of the variance in these variables.

CHAPTER 5: NONPROFITS, CIVIC COMMUNITY, AND HEALTH

Health is commonly understood as a fundamental aspect of wellbeing at both the individual and community level. This is evinced by the fact that agencies and researchers devoted to improving wellbeing at both the national and international level often include health as a primary indicator of wellbeing in their work. As an example, the Organisation for Economic Co-operation and Development *(OECD)* considers health status as one of the 11 primary dimensions of wellbeing in its *Compendium of OECD Wellbeing Indicators.* According to the OECD (2011: 36), at the individual-level, health is consistently seen as one of, "the most valued aspects of people's lives…People's health status matter in itself, but also for achieving other dimensions of wellbeing such as having good jobs and adequate income and being able to participate as full citizens in community life…."

Though not a marker of individual health per se, researchers regard infant mortality as valid indicator of population health, because it is sensitive to the same social and institutional factors that influence the health and wellbeing of individuals and communities (Brooks 1980; Cramer 1987; Newland 1981; OECD 2010; Reidpath and Allotey 2003; Rodwin and Neuberg 2005; Tolbert 2005). Research has consistently shown that infant mortality rates are significantly higher among Blacks/African Americans and Native Americans, and some Hispanic groups as compared to non-Hispanic Whites (Bird 1995; Brooks 1980; Gortmaker and Wise 1997; Hauck, Tanabe, and Moon 2011; OECD 2010; Rowley and Hogan 2012). Higher rates of infant mortality for these groups have been linked to higher rates of poverty and residential segregation (Bird 1995; McFarland and Smith 2011; Sims, Sims, and Bruce 2007), with the two primary causal mechanisms being higher incidences of prematurity and low-birth weight babies (Brooks 1980; Gortmaker and Wise 1997; Hauck, Tanabe, and Moon 2011; OECD 2010;

Rhoades, Brenneman, Lyle, and Handler 1992). Research has also found that, regardless of race or ethnicity, education is a significant predictor of infant mortality rates – women with a high-school degree or lower are more likely to experience death of an infant (Cramer 1987; Li and Keith 2011), and correspondingly places with smaller percentages of persons having a college degree have higher infant mortality rates (Bird 1995; Bird and Bauman 1995). In addition, research has also found that family income is positively associated and income inequality is negatively associated with infant mortality rates (Mayer and Sarin 2005; Nersesian 1988; Olson, Diekema, Elliot, and Reneir 2010; Rodwin and Neuberg 2005).

Civic Community and Community Health

The primary question of this portion of my investigation is to what extent is the presence of nonprofits as civically engaging and locally oriented institutions associated with the health of communities. Little civic community research has explicitly investigated this question, however, a few studies have found there to be a positive correlation between aspects of civic community and health. For example, in their study of the relationship between scale of agricultural production and community welfare, Lyson, Torres, and Welsh (2001) found that the presence of a civically engaged middle class is positively associated with community health (operationalized as the percent of low-birth weight babies in a county). In addition, in his work on the role of small retail establishments in promoting community wellbeing, Tolbert (2005) found there to be a positive relationship between employment in locally oriented enterprises and community health (operationalized as the infant mortality rate). Following the work done by Tolbert (2005), for the following analyses, I use infant mortality as a proxy for community health.

Analysis

Bivariate analysis

The first step in my analysis was to run bivariate correlations between my primary variables of interest and the infant mortality rate.[78] The purpose of the analyses is to assess the extent to which relationships exist between my nonprofit variables of interest and health and whether there is support for my hypotheses that larger, more diverse and even sectors, and those with proportionally more public benefit organizations will have better health outcomes. I expect the relationships between my nonprofit variables and the infant mortality rate to be negative. Table 7 below presents bivariate correlation statistics.

Table 7: Bivariate Correlations Between Nonprofit and Health Indicators

	Infant Mortality Rate (Deaths per 1,000 live births)
Organizational density (nonprofits per 10,000 residents)	-0.202***
Organizational diversity (diversity index)	-0.002
Organizational evenness (NTEE evenness index)	-0.024
Organizational concentration (percent public benefit)	-0.049***

Note: *** p<0.001, ** p<0.01, * p<0.05

Results presented in Table 7 indicate that all relationships are as hypothesized. There are negative, albeit weak, associations between infant mortality and each of my nonprofit measures: organizational density (r= -.202), organizational diversity (r= -.002), organizational evenness (r= -.024), and organizational concentration (r= - .05). However, only the relationships observed between my measures of organizational density (p<.001) and organizational concentration (p<.001) are statistically significant. Substantively, findings from these preliminary analyses suggest that larger sectors and those with higher proportions of public

[78] In multivariate analyses, my dependent variable is the infant death count. However, here I use the infant mortality rate homicide rate (deaths per 1,000 live births) for two reasons: 1) my model specification below allows me to interpret my dependent variable as an infant mortality rate, and 2) using the rate per 1,000 births facilitates interpretation as it is a more commonly used measure of crime

benefit organizations have lower infant mortality rates, and therefore more positive community health outcomes.

Multivariate analysis

In this portion of my analysis, I examine the relationship between nonprofit organizations as components of civic communities and community health, while controlling for a number of factors, detailed in Chapter 2, known to influence economic outcomes. It is my contention that as sites and sources of civic engagement, nonprofit organizations should be positively associated with local quality of life when characteristics of place and population (such as aggregate measures of racial identity and educational attainment and county categorization along the rural-urban continuum) known to influence wellbeing are taken into account. More specifically, as is illustrated in Figure 3 below, I hypothesize that increases in organizational density, organizational diversity, organizational evenness and organizational concentration will be correlated with lower infant mortality rates, even when possible mediating factors are taken into account.

Because infant death is a discrete and rare event, infant mortality data are not suitable for least squares regression models for which a normal distribution of outcome variables and a constant variance and independence of error terms is assumed (Osgood 2000). Therefore, I operationalize infant death as a non-negative count variable and in the models below, I use Poisson-based estimation techniques in my analysis of the relationship between infant mortality and nonprofit civic community variables. Because my data do not meet the equidispersion criterion of the Poisson distribution (i.e., that the variance is equal to the mean), I use the negative binomial regression model, a variant of the basic Poisson regression model that allows

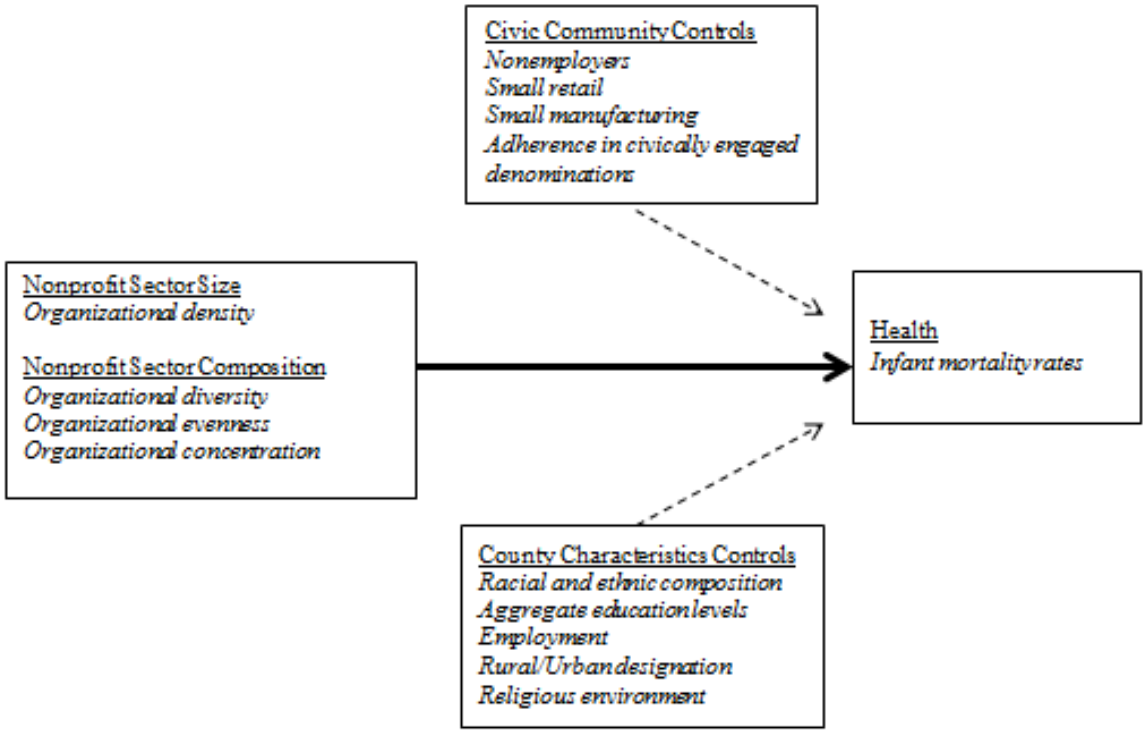

Figure 3: Civic Community and Health Conceptual Diagram

for unobserved variance with the inclusion of an error term (Long and Freese 2006; Osgood 2000).[79] In addition, since the incidence of infant death is necessarily related to the number of live births in the population, I include the natural log of the number of live births as an offset variable thereby controlling for its effect. Including a variable as an offset constrains the coefficient for the variable to 1; therefore the inclusion of the logged value of the population at risk (infants between the ages of 0 and 1) effectively allows me to interpret my dependent variable as an (per infant death) infant mortality rate (Osgood 2000).[80] As a note, in practice, the use of Poisson based techniques for the analysis of infant mortality data is not common. In my review of the literature, I found only a few examples of research using such analytic methods, (for examples, see Reidpath and Allotoy 2003; Guildea, Fone, Dunstan, Sibert, and Cartlidge

[79] The likelihood-ratio test of alpha=0 indicates that my data are overdispersed, chibar2(01)=7.5, sig=0.003.
[80] See footnote 71 for discussion of the rationale for interpreting the dependent variable as a per infant death infant mortality rate.

2001). However, Poisson based models are widely used in homicide research, which is another type of mortality event.

Below, I present my negative binomial regression model in which I regress my dependent variable, infant mortality, on the vector of variables that includes the nonprofit, civic community, and control variables discussed in Chapter 2. The equation for the model is as follows

$$Y_j / p_j = e(\beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j \ldots +} \beta_k X_{kj})\varepsilon$$

Where Y_j refers to the value of the dependent variable (infant death) for observation *j; p* refers to the population (live birth) of observation *j*; β_0 refers to the intercept, or the value of the dependent variable when all other variables are equal to zero; β_k refers to the coefficient for variable X_k for observation *j*; since it is exponentiated, it represents the expected percent change in the infant mortality rate (Y_j / p_j) for a one unit increase in the independent variable X_k., and ε is the error term, or unexplained variance.

In the process of specifying my model, I ran diagnostic tests to determine whether the inclusion of any of my variables was problematic. Diagnostic tests did not reveal a problem of multicollinearity between my independent variables.[81] Bivariate correlations reveal no problematic association between any two of my variables; in no case was $r>.7$. Furthermore, I also examined my models using OLS regression so that I could obtain variance inflation factors (VIF) for all variables in the model. This diagnostic also indicates no problems of association between my variables, no VIF was above 4, and the mean VIF was 2.14.[82]

Table 8 presents the results of my negative binomial regression model predicting county infant mortality rates. I present the model coefficient (*b*) and the corresponding level of statistical significance. In addition, I provide two transformed coefficients in order to ease

[81] See footnote 59 for a brief discussion of the problem of multicollinearity.
[82] See footnote 58 and 60 for a brief discussion of rationale for determining if multicollinearity is problematic.

interpretation of results. In the column with the heading *percent change*, the coefficient can be interpreted as the percent change in expected infant mortality rate for a one-unit increase in X (the independent variable).[83] In the column labeled *standardized percent change*, the coefficients represent the percent change in the expected homicide rate for a one standard deviation increase in X.[84]

I hypothesized that my measures of nonprofit sector size (organizational density) and sector composition (organizational diversity, evenness, and concentration) would be negatively associated with the infant mortality rate. As can be seen in Table 8, the results of my model reveal no associations between infant mortality and my measures of nonprofit sector size (organizational density) and composition (organizational diversity, evenness, and concentration).

Regarding other variables included in my model, two of my four civic community variables performed as expected. My measures of nonemployers and adherence in civically engaged denominations are negatively associated with infant mortality. A one standard deviation increase in the number of nonemployers per 10,000 residents is associated with a -7.1% decrease in the per capita infant mortality rate, and a one standard deviation increase in the percent of religious adherents in civically engaged denominations is linked to a 4% decrease in the infant mortality rate. No relationships are evident between infant mortality and small retail and small manufacturing.

In terms of my county level controls, household income, aggregate employment and county racial and ethnic composition are also significantly correlated with infant mortality.

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[83] The following formula can be applied to the raw coefficient so that it may be interpreted as the percent change in the expected rate (see footnote 66):

$(\exp(\beta_k)-1))*100$

[84] The following formula can be applied to the raw coefficient so that it may be interpreted as the percent change in the expected rate for a one standard deviation increase in the variable (see footnote 66):

$(\exp(\beta_k*sd_k)-1))*100$

Where β_k is the raw coefficient from the negative binomial equation, and sd_k is the standard deviation of the independent variable.

Table 8: Negative Binomial Regression of Infant Mortality

VARIABLES	b	Percent change	Standardized percent change
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	-0.0002	0.0%	-0.5%
Organizational diversity (diversity index)	0.0138	1.4%	1.4%
Organizational evenness (NTEE evenness index)	0.1440	15.5%	0.8%
Organizational concentration (percent public benefit)	-0.0018	-0.2%	-1.8%
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	-0.0004***	0.0%	-7.1%
Small retail (establishments per 10,000 residents)	0.0002	0.0%	3.4%
Small manufacturing (establishments per 10,000 residents)	-0.0006	-0.1%	-1.4%
Percent in civically engaged denominations	-0.0017**	-0.2%	-4.0%
CONTROL ITEMS			
Median household income	0.0000***	0.0%	0.0%
Percent unemployed	-0.0130**	-1.4%	-3.4%
Percent Hispanic	-0.0032***	-0.4%	-3.8%
Percent Black	0.0083***	0.8%	13.8%
Percent with at least a high school education	-0.0004	0.0%	-0.4%
Urban Influence (Large metro reference)			
Small metro area	-0.0130	-1.4%	
Micropolitan adjacent to large metro area	-0.0393	-3.9%	
Noncore adjacent to large metro area	-0.0505	-4.9%	
Micropolitan adjacent to small metro area	-0.0426	-4.2%	
Noncore adjacent to small metro area, with town	-0.0448	-4.4%	
Noncore adjacent to small metro area, no town	-0.0261	-2.6%	
Micropolitan area not adjacent to a metro area	-0.0502	-4.9%	
Noncore adjacent to micro area, with town	-0.0201	-2.0%	
Noncore adjacent to micro area, no town	-0.0071	-0.7%	
Noncore not adjacent to metro/micro area, with town	-0.0697	-6.7%	
Noncore not adjacent to metro/micro area, no town	0.1190	12.6%	
Congregational density (congregations per 10,000 residents)	-0.0025	-0.4%	-3.4%
Adherence rate (adherents per capita)	-0.0465	-4.5%	-1.1%
Medical Professional Shortage Area	-0.0062	-0.6%	-0.4%
Constant	-4.243***		
Observations	3,065		
Likelihood ratio chi-square	922.27***		
Pseudo R squared	.0868		

Note: *** p<0.001, ** p<0.01, * p<0.05

In terms of my county level controls, household income, aggregate employment and county racial and ethnic composition are also significantly correlated with infant mortality. Findings show that negative relationships exist between infant mortality between income, percent Hispanic, and surprisingly percent unemployed. Substantively this means that as median income, the proportion of the population that identifies as Hispanic, and the percent of the labor force that is unemployed increase, infant mortality decreases. By contrast, a positive association is evident between infant mortality and proportion of the population that identifies as Black or African American – a one standard deviation increase in percent Black is associated with over a 13% increase in the per capita infant mortality rate.

The Pseudo R squared suggests that when all variables are included in the models, there is a .0868 improvement over the null model (or constant only model). The significant likelihood ratio chi-square ($chi2=922.27$; $p<.000$) confirms that as a whole, the variables in the model have an effect or are significantly associated with the outcome variable (infant mortality rate). However, unlike with the R squared reported in OLS regression models, neither provides an indication of the variance explained by the model.

Summary

Prior civic community scholarship indicates that places considered to be civic communities (those with relatively high numbers of locally oriented businesses and civically engaging institutions) tend to exhibit better health of residents (Lyson et al. 2001; Tolbert 2005). In this chapter, I extend this research by investigating the relationship between nonprofit organizations as civically engaged and locally oriented institutions and community health. The goal of the chapter was to test my hypotheses that a) larger sectors, b) more diverse sectors, c) sectors in which organizations are more evenly spread across service areas, and d) sectors in

which there are higher concentrations of public benefit organizations have lower infant mortality rates.

While results from bivariate analyses lend support for hypothesized relationships between nonprofit sector size, organizational composition, and infant mortality, they also reveal that the associations present are relatively weak. Therefore, it is not entirely surprising that results of my negative binomial model, in which I control for other influential relationships, provide no support for my hypotheses. Findings indicate that when controlling for influential covariates no relationships exist between infant mortality and nonprofit sector size or composition.[85]

I believe that one plausible reason results are not as expected is that my unit analysis is too broad. Past research on nonprofits shows that nonprofit organizations are not evenly distributed across or within place. Research has shown that at the neighborhood level, the most disadvantaged areas often have the least support for and presence of nonprofit organizations (Beilefeld 2000; Fyfe and Milligan 2003; Gronbjerg and Paarlberg 2001). Coupled with research that indicates that health outcomes are influenced by neighborhood factors (such as affluence, concentrated poverty, social disorder, stressful social conditions, and residential stability) and therefore vary across neighborhood settings (Browning and Cagney 2003; Morenoff 2003; Schempf, Strobino, and O'Campo 2009), this suggests that my models overlook a potential spatial link between nonprofit institutions and health. Future research should take into account not only the number of organizations within a community, but also how the distribution of organizations at the neighborhood level affects community health.

[85] These findings are largely confirmed with sensitivity analyses performed using only data updated by NCCS (results presented in Table B4 of Appendix B). However, it is notable that in the NCCS updated model, a significant negative relationship is apparent between organizational density and infant mortality which lends support to my hypothesis that a positive relationship exists between the number of nonprofit organizations in a locale (relative to the population size) and community health.

CHAPTER 6: DISCUSSION AND CONCLUSION

Previous research on civic communities has provided a framework for understanding how the local institutional structure of place affects community wellbeing. Civic community scholarship suggests that locally oriented businesses and civically engaged institutions are beneficial to communities because they are embedded in locales and promote civic engagement amongst residents (Tolbert et al. 1998; Tolbert 2002; Tolbert 2005). As these organizations foster local connection and civic engagement, they create, according to Tolbert et al. (2002: 111), "distinct problem solving structures…that engender resilience and resistance against global forces." Research has found that places with relatively large numbers of locally oriented businesses and civically engaged institutions tend to have better quality of life, meaning that residents are exposed to less crime and violence; they have better health and are more economically secure (Irwin and Tolbert 1997; Lee 2008; Lyson et al. 2001; Tolbert et al. 1998; Tolbert 2002; Tolbert 2005).

While civic community research has gone far in explicating the importance of small, locally oriented businesses and civically engaged denominations for local quality of life, the literature's treatment of secular civically engaging organizations has been rather one-dimensional. Largely, researchers have focused only on the role of membership associations as civically engaged organizations in the promotion of civic engagement and social wellbeing.

The primary contribution of this dissertation to existing literature on civic communities is the theoretical development of the concept of civically engaging institutions. That is, in this dissertation, I take a multifaceted approach to the understanding and investigation of civically engaged institutions, in which I expand the concept beyond civic congregations and associations, to include all organizations categorized as nonprofit. Synthesizing literatures on nonprofit

organizations and civic communities, I argue that nonprofits can be considered locally oriented and civically engaged as they are economically embedded in locales and dependent on local populations as sources of volunteers and labor, and as consumers for services; they often exclusively local and/or tailor their services to local populations; they often are oriented towards the public good; and they are often sites and sources of association and civic activities.

This dissertation also contributes to civic community scholarship through the investigation of nonprofits as civic institutions; I examine how the size of local nonprofit sectors (i.e., number of nonprofits in a locale, relative to the population size) is related to community wellbeing. Also, believing that different types of nonprofits offer potentially unique benefits to locales, I examine how local wellbeing is related to the composition of local nonprofit sectors in terms of organizational diversity (i.e., how many service areas are present in a locale) organizational evenness (i.e., how evenly spread organizations are across service areas), and organizational concentration (i.e., how concentrated a sector is regarding public benefit organizations). I hypothesize that increases in these measures of nonprofit sector size and structure will be associated with increases in measures of local quality of life. I assess these hypotheses using three analytic models which explore three components of wellbeing on which past research has found civic institutions to have a positive effect – these are local economic wellbeing (families poverty and median income), safety (homicide rate), and health (infant mortality rate). Though findings both support and negate my hypothesized relationships, results demonstrate that nonprofit sector structure is a significant determinant of local quality of life.

Summary of Findings

As a preliminary test of my assertion that nonprofit organizations are civic institutions similar to those typically recognized in literature, I conducted a principle component factor

analysis (with varimax rotation) to examine the structure of the relationships between my measures of small manufacturing, small retail, nonemployers and organizational density. I was testing whether these variables can be said to be measuring the same underlying concept, which I call civic institutions. Results confirm my assertion. The analysis yielded one factor, with an eigenvalue of 2.47 that accounts for 62% of the variance in these variables.[86,87]

Regarding tests of my hypotheses, negative relationships were expected between my nonprofit measures and poverty, homicide, and infant mortality, and positive relationships were expected between my nonprofit measures and income. An overview of hypothesized relationships and findings is presented in Table 9.

Table 9. Summary of Findings from Regression Models

	Family Poverty		Median Income		Homicide		Infant Mortality	
	Relationship		Relationship		Relationship		Relationship	
Nonprofit Variable	Expected	Observed	Expected	Observed	Expected	Observed	Expected	Observed
Organizational Density	-	-	+	**none**	-	+	-	**none**
Organizational Diversity	-	+	+	**none**	-	+	-	**none**
Organizational Evenness	-	**none**	+	**none**	-	+	-	**none**
Organizational Concentration	-	-	+	+	-	+	-	**none**

In my first analyses, I examined the relationship between nonprofits as civic institutions and economic wellbeing (Chapter 3). Results indicate that local nonprofit structure is a

[86] Factor loadings for organizational density, nonemployers, and small retail are all above .7 (.79, .82, .88, respectively). The small manufacturing measure has the lowest loading of .6.

[87] There is debate concerning the use of principal components analysis instead of principle factor analysis. According to Darlington (*N.d*), "common factor analysis comes closer to solving the problems most researchers actually want to solve." As such, I conducted a common factor analysis as well, to ascertain whether results are substantively different. One factor resulted with an eigenvalue of 1.57 that explains 90% of the variance in the variables. However, while factor loadings for nonprofit organizational density (.72), small retail (.78), and nonemployers (.56) all fell closely together, the factor loading for small manufacturing was considerably lower (.42).

significant predictor of both family poverty and household income. Findings show that places with larger, denser sectors and higher concentrations of public benefit organizations have less poverty and higher income. By contrast, places with more diverse sectors have higher poverty rates.

In my second analysis, I examined the relationship between nonprofit sector structure and crime (Chapter 4). Though the direction of results are contradictory to my hypotheses (i.e., that nonprofit sector size and structure would correspond to lower homicide rates), findings do suggest that nonprofit structure is a significant predictor of local homicide levels. Organizational density, diversity, evenness, and concentration are all positively associated with homicide, suggesting that places with larger, more diverse and even sectors, and places with higher concentrations of public benefit organizations (and therefore lower concentrations of member benefit organizations) have higher homicide rates.

In my third analysis, I examined the relationship between nonprofit sector structure and health (Chapter 5). Findings provide no support for my expectations that nonprofit sector structure would positively influence health. None of my nonprofit sector measures were significantly related to local infant mortality rates.

One plausible reason results that my models predicting homicide and infant mortality are not as expected is that my models do not examine the configuration of nonprofits within communities, and they therefore fail to capture possible spatial-effects that influence results. Past research on nonprofits shows that nonprofit organizations are not evenly distributed across or within place. Research has shown that at the neighborhood level, the most disadvantaged areas often have the least support for and presence of nonprofit organizations (Beilefeld 2000; Fyfe and Milligan 2003; Gronbjerg and Paarlberg 2001). Similarly, research has shown that

neighborhoods are not equal in terms of poverty, crime, and health. Poverty is often concentrated within particular areas and neighborhoods (Erickson et al. 2008). And where neighborhoods are resource bare and unable to support the institutional structure (e.g., high density of nonprofit organizations) that might buffer residents against the adverse effects of poverty, research suggests we should expect higher crime and worse health (Browning and Cagney 2003; Erickson et al. 2008; Morenoff 2003; Sampson, Morenoff, and Earls 1999; Schempf, Strobino, and O'Campo 2009; Wilson 1986; 1996). If poverty is highly concentrated in certain areas of a community and those areas have no institutional resources, then even if community nonprofit sectors are very large, they are unlikely to mitigate the negative effects of poverty or help to reduce/stave off crime and improve health. In other words, the unexpected results of my models for crime and health may be result of a spatial misspecification. Since both crime and infant mortality are rare and localized events, if the institutional structure of place does not effectively support the places where these events are likely to occur, then homicide and mortality rates for the entire locale will likely not be affected by the presence of organizations known to benefit wellbeing. Places considered civic communities should have a relatively even distribution of civic institutions across space – ensuring that all community members have the same access to institutional resources. Moreover, in places where institutional resources are more evenly distributed, we should expect more positive community wellbeing. Therefore, research needs to be conducted that takes into account the distribution of institutions and wellbeing within communities.

In conclusion to my dissertation, I provide an overview of some additional limitations of my study and possible avenues for future research that largely derive from them. I believe further investigation in these areas could help clarify the results found in this dissertation and

serve to further define how nonprofits are related not only to wellbeing but also how they fit into the civic community framework.

Study Limitations and Implications for Future Research

Data quality

One of the main limitations of this study is the uncertainty of the quality of the BMF data used to assess nonprofit sector characteristics. As detailed in Chapter 2, data on many organizations (including religious organizations, as well as small secular organizations, those less than $25,000 in annual gross receipts) were not systematically kept nor verified by the IRS prior to 2008.[88] Though I took steps to improve the quality of the data and to verify the accuracy of my results, in practice, this limitation means that some of the data used in the present analysis (which were from returns completed in 2001) are erroneous.

Though findings indicate that relationships do exist between nonprofit sector characteristics and community wellbeing (and secondary analyses using NCCS updated data verify these findings), results should be interpreted with caution. Further work, which uses data that are more recent, needs to be done to verify the accuracy of the results reported here. More specifically, I propose duplicating the current study using NCCS maintained BMF data dating back no later than June 2011. This date is important because it roughly corresponds to new filing practices adopted by the IRS in 2008. As of 2008, small organizations are required to complete form 990-N (e-Postcard) annually to verify they are still operating and have under $50,000 worth of annual gross receipts. However, though the new e-Postcard filing system was instituted by the IRS in 2008, organizations have a three-year grace period before they lose their exempt status and their data are purged from the tax-exempt database maintained by NCCS (U.S. Department of Treasury, Internal Revenue Service 2013b). Therefore, the data manager at NCCS suggested

[88] See footnote 26 and 27.

that by July 2011, the effects of the new filing system should be realized in the BMF database and the data should be more reliable.[89]

Causal inference

Another limitation of the current study is that with my models as they are currently specified, I cannot truly infer whether the size and structure of local nonprofit sectors are determinants of wellbeing or if, vice versa, wellbeing is a determinant of the size and structure of the nonprofit sector. Civic community scholarship suggests the former; through enhancing civic engagement and social wellbeing, nonprofits in their roles as civically engaged institutions are enhancing wellbeing. On the other hand, nonprofit scholars have suggested that community resources should dictate the size of nonprofit sectors. Researchers have argued that communities with more economic resources should have larger nonprofit sectors because they have the ability to support nonprofit organizations in terms of both financial contributions and volunteer time (Beilefeld 2000; Gronbjerg and Paarlberg 2001). In order to investigate these relationships, future research should examine how nonprofit size and structure correspond to wellbeing over time. This could be done in a number of ways. However as a starting point, lagged panel analyses, similar to those done by Lyson et al. (2001), could be conducted in which independent variables are included in models from a time prior to the dependent variables (as they currently are in my models), and measures of the dependent variables from that same time point are included as independent variables. Results would indicate how the structure of nonprofit sectors affects changes in wellbeing.

Causal mechanisms

In this dissertation, I make the case that nonprofit organizations should be considered civically engaging and locally oriented organizations because they *theoretically* should increase

[89] See footnote 24.

civic engagement and social cohesion. However, it was outside the scope of this dissertation to empirically test these assertions. Within the framework of the civic community perspective, future work should examine to what extent nonprofits are related to increased civic engagement in locales and to what extent they can be considered locally oriented in the same way as other local businesses.

Local Orientation. To investigate the orientation of local nonprofit sectors—the size of the local nonprofit labor force and the percentage of wages that this labor force garners should be considered. These measures should indicate how emplaced nonprofit organizations are in local economies and within local populations. If local orientation, in terms of economic embeddedness of organizations, works the same way in nonprofits as it does locally oriented businesses, then an analysis should reveal that localities where more people are employed in nonprofits and where higher percentages of local wages are earned in nonprofits should have better quality of life.

Civic Engagement. An analysis of civic engagement should take into account the three civic behaviors discussed in Chapter 1, volunteering, group involvement (association), and political activity (e.g., voting and protesting), that are theorized to be enhanced by nonprofit organizations. If nonprofits act as other civically engaged and locally oriented institutions, then we should expect that civic engagement is greater in areas where there are larger, denser nonprofit sectors.

Organizational size

Lastly, in this dissertation, because I do not have nonprofit employment data and the financial variables that I do have are unreliable, I do not consider in my primary analyses how organizational size is a potential mediating factor in the relationship between nonprofit

organizations and wellbeing. Though I argue that all nonprofit organizations can be considered civically engaging and locally oriented, it may be the case that as with other civic institutions that size matters – that is, it may be the case that smaller organizations are more beneficial to locales than larger organizations. Literature on membership associations and nonprofit organizations lends support to this idea – research has shown that the size of organizations affects their capacity to promote civic engagement, especially in terms of developing the trust, skills, and values necessary for social and political involvement. Research has shown that participation in small groups and organizations generates closer ties, more group involvement and opportunities, and more interest in civic affairs (Clemens 2006; Dekker and van den Brock 1998; Gronbjerg and Paarlberg 2001; Marcello and Perrucci 2009; Tolbert 2005). Participation in large organizations is not as conducive to civic engagement as there are "fewer opportunities for participatory governance and democratic socialization of members" (Clemens 2006: 211).

Because I believe this is a particularly salient avenue for future research, though my measures and data are imperfect, I ran several exploratory analyses (using my primary dataset and my dataset with NCCS updated data) in which I considered how organizational size potentially influences wellbeing. Regarding the construction of a measure of organizational size, the BMF data I obtained from NCCS do not provide information on number of employees, volunteers, or members, so I cannot make measures of size that are similar to measures of other civic institutions. However, the BMF dataset does provide information on organizational assets, which I used as a proxy for size. For this exploratory analysis, assets are considered an adequate indicator of size for several reasons. One, the larger the assets, the more human resources it will take to manage them—thus the more employees, volunteers, or members will be needed. Second, assets also represent the potential economic resources and capabilities organizations

have to reach and serve their members/clients. The more assets, the more effective organizations might be in delivering services.

For these analyses, I created a variable similar to my measure of nonprofit organizational concentration – it is the percent of the sector composed of small organizations – those with $100,000 or fewer in assets. I tested the effect of small organizations on wellbeing for each of my outcomes of interest; I included in my models (see Appendix C) all the variables from my primary analyses (no problems of multicollinearity were found). Findings provide support for the assertions that organizational size is an influential characteristic of nonprofits and that organizational size should positively influence wellbeing. Findings from both my primary and secondary datasets, organizational size had a significant and negative effect on poverty, homicide, and infant mortality, though no relationship is evident for income. Since these measures and data are imperfect, these results should be considered suggestive of fact that size matters. However, further research should be conducted to more fully explore how the size of nonprofit organizations matters in promoting local quality of life.

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APPENDIX A: NONPROFIT CLASSIFICATION TABLES AND DISCUSSION

Nonprofit Classification Typology and Descriptive Statistics

Table A1 presents the classification scheme I created to categorize public- and member-benefit organizations, as well as counts for each organizational type. This table illustrates how my data management decisions (discussed in Chapter Two) altered the BMF dataset obtained from NCCS and how the datasets compare to one another in terms of organizational composition. The column entitled "Original Data" refers to the original dataset obtained from NCCS; the column entitled "Primary Data" refers to the dataset I used for primary analysis; the column entitled "NCCS Updated Data" refers to the dataset with only NCCS updated observations.

Though my primary dataset contains over 268,000 fewer observations (approximately 20%) than does the original dataset and the NCCS dataset with only updated observations contains 632,655 (51%) fewer, as can be seen from these tables, the three datasets are proportionally comparable. The vast majority of all organizations are 501(c)(3)s and accordingly, public-benefit organizations comprise the largest proportion of the nonprofit sector in each dataset. Proportionally speaking, where there are differences between datasets they are relatively small. Comparing my primary dataset to the original BMF dataset, the largest difference regarding IRC defined organizational types occur with 501(c)(3)s – there are 3.4% more in my primary dataset. The differences between my variables of interest are smaller – my primary dataset contains approximately 2% fewer member-benefit organizations (and accordingly 2% more public-benefit) as compared to the original dataset.

Table A1: Nonprofit Classification Typology and Organizational Counts[90,91,92]

Section of IRC	IRS Description of Organization	IRS Stated General Nature of Activities	Original Data		Primary Data		NCCS Updated Data	
			Count	Percent	Count	Percent	Count	Percent
Public Benefit Organizations								
501(c)(3)[93]	Religious, Educational, Charitable, Scientific, Literary, Testing for Public Safety, to Foster National or International Amateur Sports Competition, or Prevention of Cruelty to Children or Animals Organizations	Activities of nature implied by description of class of organization	802,304	62.1%	602,216	58.8%	433,743	65.8%
501(c)(4)	Civic Leagues, Social Welfare Organizations, and Local Associations of Employees	Promotion of community welfare; charitable, educational, or recreational	119,331	9.2%	106,322	10.4%	52,368	7.9%
501 (d)	Apostolic and Religious Organizations	Regular business activities; Communal religious community	127	0.0%	--	0.0%	--	0.0%

[90] Nearly all descriptions found in in Table A1 are verbatim descriptions obtained from the document *Tax-Exempt Status for Your Organization* (U.S. Department of Treasury, Internal Revenue Service 2011). However, the aforementioned document did not provide descriptions of all organizations, thus other sources were consulted. See Barnett and Thomas 2004; Frederick 2012; Internal Revenue Service 1979; U.S. Department of Treasury, Internal Revenue Service 2012a.

[91] There are 58 observations in the raw BMF dataset for which no IRC code is given. These are simply coded as organization other than 501(c)(3). These are excluded from the taxonomy detailed below and from analyses that break down the sector accordingly (diversity and composition); they are included in measures of the whole sector (i.e., organizational density).

[92] Dropped from the original dataset are the following (organizations may be represented in this list more than once): 2,206 organizations deemed "out of scope"; 170,669 churches and religious organizations; 6,241organizations located in Hawaii; 4,390 organizations located in Alaska; 1,332 organizations located in Puerto Rico; 1,334 organizations with no geographic identifiers or FIPS codes; and 93,440 organizations duplicates in terms of name, zip code, and IRC code. Since items in this list are not mutually exclusive, the sum of the items does not equal the number of observations dropped from the dataset

[93] Approximately 90% of organizations described in IRC subsection 501(c)(3) are considered either operating public charities (i.e., nonprofits organized for charitable purposes that directly engage in an activity that provides some broad public benefit) or supporting public charities (i.e., foundations or grant making organizations that distribute money to public charities). The other 10% are in reality mutual benefit organizations that provide services to members. These are considered an "anomaly among public charities" (Urban Institute, National Center for Charitable Statistics 2006) and are here considered as member interest organizations.

(Table A1 continued)

Section of IRC	IRS Description of Organization	IRS Stated General Nature of Activities	Original Data		Primary Data		NCCS Updated Data	
			Count	Percent	Count	Percent	Count	Percent
501(e)	Cooperative Hospital Service Organization	Performs cooperative services for hospitals	21	0.0%	20	0.0%	15	0.0%
501(f)	Cooperative Service Organization of Operating Educational Organization	Performs collective investment services for education organizations	1	0.0%	1	0.0%	--	0.0%
Member Interest Organizations								
Membership Associations								
501(c)(3)	See footnote 93		1,652	0.1%	1,577	0.2%	872	0.1%
501(c)(4)*	See footnote 93		1,582	0.1%	1,478	0.1%	614	0.1%
501(c)(5)	Labor, Agricultural, and Horticultural Organizations	Educational or instructive, the purpose being to improve conditions of work, and to improve products of efficiency	59,318	4.6%	50,948	5.0%	29,047	4.4%
501(c)(6)	Business Leagues, Chambers of Commerce, Real Estate Boards, etc.	Improvement of business conditions of one or more lines of business	70,857	5.5%	65,067	6.4%	45,630	6.9%
501(c)(7)	Social and Recreational Clubs	Pleasure, recreation, social activities	55,750	4.4%	51,692	5.1%	32,937	5.0%
501(c)(8)	Fraternal Beneficiary Societies and Associations	Lodge providing for payment of life, sickness, accident or other benefits to members	78,256	6.1%	52,338	5.1%	11,268	1.7%
501(c)(10)	Domestic Fraternal Societies and Associations	Lodge devoting its net earnings to charitable, fraternal, and other purposes. No life, sickness or accident benefits to members	23,059	1.8%	16,833	1.6%	4,337	0.7%

(Table A1 continued)

Section of IRC	IRS Description of Organization	IRS Stated General Nature of Activities	Original Data		Primary Data		NCCS Updated Data	
			Count	Percent	Count	Percent	Count	Percent
501(c)(19)	Post or Organization of Past or Present Members of the Armed Forces	Activities implied by nature of organization	34,515	2.7%	31,835	3.1%	11,576	1.8%
Mutual Benefit Organizations								
501(c)(1)	Corporations Organized Under Act of Congress (including Federal Credit Unions)	Instrumentalities of the United States	66	0.0%	66	0.0%	5	0.0%
501(c)(2)	Title Holding Corporation for Exempt Organization	Holding title to property of exempt organization	5,967	0.5%	5,714	0.6%	5,049	0.8%
501(c)(3)	See footnote 93		387	0.0%	376	0.0%	313	0.0%
501(c)(4)	See footnote 93		90	0.0%	88	0.0%	55	0.0%
501(c)(9)	Voluntary Employee Beneficiary Associations	Providing for payment of life, sickness, accident or other benefits to members	11,402	0.9%	11,238	1.1%	9,968	1.5%
501(c)(11)	Teachers' Retirement Fund Associations	Teachers' association for payment of retirement benefits	13	0.0%	13	0.0%	10	0.0%
501(c)(12)	Benevolent Life Insurance Associations, Mutual Ditch or Irrigation Companies, Mutual or Cooperative Telephone Companies, etc.	Activities of a mutually beneficial nature similar to those implied by the description of class of organization	5,837	0.5%	5,779	0.6%	5,250	0.8%
501(c)(13)	Cemetery Companies	Burials and incidental activities	9,385	0.7%	8,845	0.9%	7,669	1.2%
501(c)(14)	State-Chartered Credit Unions, Mutual Reserve Funds	Loans to members	4,077	0.4%	3,659	0.4%	1,604	0.2%
501(c)(15)	Mutual Insurance Companies or Associations	Providing insurance to members substantially at cost	1,314	0.1%	1,130	0.1%	977	0.1%
501(c)(16)	Cooperative Organizations to Finance Crop Operations	Financing crop operations in conjunction with	22	0.0%	22	0.0%	18	0.0%

(Table A1 continued)

Section of IRC	IRS Description of Organization	IRS Stated General Nature of Activities	Original Data		Primary Data		NCCS Updated Data	
			Count	Percent	Count	Percent	Count	Percent
		activities of a marketing or purchasing association						
501(c)(17)	Supplemental Unemployment Benefit Trusts	Provides for payment of supplemental unemployment compensation benefits	371	0.0%	369	0.0%	264	0.0%
501(c)(18)	Employee Funded Pension Trust (created before June 25, 1959)	Payment of benefits under a pension plan funded by employees	1	0.0%	1	0.0%	1	0.0%
501(c)(20)	Group Legal Services Plan	Trusts formed as part of qualified group legal services plans.	10	0.0%	10	0.0%	9	0.0%
501(c)(21)	Black lung Benefit Trusts	Funded by coal mine operators to satisfy their liability for disability or death due to black lung diseases	28	0.0%	28	0.0%	--	0.0%
501(c)(23)	Veterans Organization (created before 1880)	To provide insurance and other benefits to members	2	0.0%	2	0.0%	2	0.0%
501(c)(24)	Employee Retirement Income Security Act (ERISA) Trust		1	0.0%	--	0.0%	--	0.0%
501(c)(25)	Title Holding Corporations or Trusts with Multiple Parents	Holding title and paying over income from property to 35 or fewer parents or beneficiaries	1,264	0.1%	1,242	0.1%	1,196	0.2%
501(c)(26)	State-Sponsored Organization Providing Health Coverage for High-Risk Individuals	Provides health care coverage to high-risk individuals	9	0.0%	8	0.0%	7	0.0%
501(c)(27)	State-Sponsored Workers'	Reimburses members	7	0.0%	7	0.0%	4	0.0%

(Table A1 continued)

Section of IRC	IRS Description of Organization	IRS Stated General Nature of Activities	Original Data		Primary Data		NCCS Updated Data	
			Count	Percent	Count	Percent	Count	Percent
	Compensation Reinsurance Organization	for losses under workers' compensation acts						
521 (a)	Farmers' Cooperative Associations	Cooperative marketing and purchasing for agricultural procedures	1,090	0.1%	1,081	0.1%	985	0.1%
1381(a)(2)	Taxable Farmers Coop	Cooperative organization not exempt under section 521	496	0.0%	487	0.0%	374	0.1%
4947(a)(1)	Non Exempt Charitable Trust	Trust established for exclusively charitable interests (beneficiaries)	3,128	0.0%	2,983	0.0%	2,920	0.0%
4947(a)(2)	Split Interest Trust	Trust established for both charitable and non-charitable interests (beneficiaries)	62	0.2%	62	0.4%	60	0.4%

In Table A2, I present both organizational-level and county-level descriptive statistics for the nonprofit sector as well as public- and member-benefit subsectors. The counts and percentages were obtained from the organizational-level (un-aggregated) datasets, the means from the county-level datasets (aggregated).

Table A2: Organizational Counts and County Means for Nonprofit Sector Variables of Interest

	Original Data			Primary Data			NCCS Updated Data		
	Count	Percent	County Mean	Count	Percent	County Mean	Count	Percent	County Mean
Total Public Benefit Organizations	921,784	71.4%	286	708,559	69.2%	231	486,126	73.8%	159
Total Membership Associations	324,989	25.2%	101	271,768	26.6%	89	136,281	20.7%	45
Total Mutual Benefit Organizations	45,029	3.5%	14	43,210	4.2%	14	36,740	5.6%	12
Total Member Benefit Organizations	370,018	28.7%	115	314,978	30.8%	103	173,021	26.4%	57
All Nonprofit Organizations	1,291,802		401	1,023,537		334	659,147		216

National Taxonomy of Exempt Entities Classifications

Table A3 below, presents the National Taxonomy of Exempt Entities (NTEE) classification scheme. Under the NTEE system, organizations are classified as belonging to one of 10 divisions (e.g., arts, culture and humanities; education; or health) and 26 subdivisions (e.g., health care; mental health and crisis intervention) which reflect broad service areas (Urban Institute, National Center for Charitable Statistics 2009d). The full NTEE classification further classifies organizations according to specific activities and types of institutions, however, for the sake of brevity these are not listed here.[94]

I use the broad division NTEE codes (those marked by Roman numerals) to create my nonprofit sector diversity and evenness measures. I include in the table below the average county composition for organizations included in my primary dataset. That is, I present the mean percentages of each category with the exception of religious organizations, which are omitted, from my analyses. As can be seen in the table, in the average county the make-up of the nonprofit sector is relatively diverse. A plurality, but by no means a majority, of nonprofits are categorized as human service organizations, and nearly are quarter are NTEE designated mutual- or membership-benefit organizations. Arts, education, health, and public or societal benefit organizations are fairly evenly distributed, each accounting for between seven and eleven percent of the sector. International organizations make up less than one percent of the sector, however this is likely a result of the fact that I dropped organizations that were "out-of-scope" (i.e., I dropped organizations that NCCS describes as foreign-based or operating overseas).

[94] The full classification scheme can be found on the NCCS website at: http://nccs.urban.org/classification/NTEE.cfm

Table A3: Descriptive Statistics on Nonprofit Organizations by NTEE Common Code

NTEE Code and Description			County Mean	SD
I.	Arts, Culture and Humanities		9.4%	6.0%
	A.	Arts, Culture and Humanities		
II.	Education		11.2%	6.6%
	B.	Education		
III.	Environment		4.0%	4.0%
	C.	Environment;		
	D.	Animal-Related		
IV.	Health		7.9%	5.1%
	E.	Health Care		
	F.	Mental Health and Crisis Intervention		
	G.	Diseases, Disorders, and Medical Disciplines		
	H.	Medical Research		
V.	Human Services		34.5%	9.8%
	I.	Crime and Legal-Related		
	J.	Employment		
	K.	Food, Agriculture, and Nutrition		
	L.	Housing and Shelter		
	M.	Public Safety, Disaster Preparedness, and Relief		
	N.	Recreation and Sorts		
	O.	Youth Development		
	P.	Human Services		
VI.	International, Foreign Affairs		0.4%	0.9%
	Q.	International, Foreign Affairs, and National Security		
VII.	Public, Societal Benefit		6.9%	6.5%
	R.	Civil Rights, Social Action, and Advocacy		
	S.	Community Improvement and Capacity Building		
	T.	Philanthropy, Voluntarism, and Grantmaking Foundations		
	U.	Science and Technology		
	V.	Social Science		
	W.	Public and Societal Benefit		
VIII.	Religion-Related		n/a	n/a
	X.	Religion-Related		
IX.	Mutual and Membership Benefit		25.5%	8.6%
	Y.	Mutual and Membership Benefit		
X.	Unknown		0.2%	0.7%
	Z.	Unknown		

APPENDIX B. STATISTICAL MODELS USING NCCS UPDATED DATA

Table B1: OLS Regression of Family Poverty using NCCS Updated Data

VARIABLES	*b*		β
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	-0.0010	*	-0.05
Organizational diversity (NTEE diversity index)	0.0300	**	0.06
Organizational evenness (NTEE evenness index)	0.0375		0.00
Organizational concentration (percent public benefit)	-0.0020	*	-0.04
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	-0.0002	**	-0.07
Small retail (establishments per 10,000 residents)	0.0000		-0.01
Small manufacturing (establishments per 10,000 residents)	0.0003		0.01
Percent in civically engaged denominations	-0.0045	***	-0.22
CONTROL ITEMS			
Percent unemployed	0.0684	***	0.46
Percent Hispanic	0.0063	***	0.16
Percent Black	0.0061	***	0.19
Percent with at least a high school education	-0.0078	***	-0.16
Urban Influence (Large metro reference)			
Small metro area	0.1890	***	0.16
Micropolitan adjacent to large metro area	0.2610	***	0.09
Noncore adjacent to large metro area	0.2480	***	0.10
Micropolitan adjacent to small metro area	0.2560	***	0.15
Noncore adjacent to small metro area, with town	0.2420	***	0.16
Noncore adjacent to small metro area, no town	0.2350	***	0.11
Micropolitan area not adjacent to a metro area	0.2400	***	0.14
Noncore adjacent to micro area, with town	0.2470	***	0.12
Noncore adjacent to micro area, no town	0.2850	***	0.14
Noncore not adjacent to metro/micro area, with town	0.2750	***	0.11
Noncore not adjacent to metro/micro area, no town	0.4230	***	0.15
Congregational density (congregations per 10,000 residents)	0.0078	***	0.21
Adherence rate (adherents per capita)	-0.0793	*	-0.04
Constant	2.171	***	
Observations	3,058		
Adjusted R-squared	0.621		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table B2: OLS Regression of Median Household Income using NCCS Updated Data

VARIABLES	***b***		**β**
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	0.0007	**	0.05
Organizational diversity (NTEE diversity index)	0.0029		0.02
Organizational evenness (NTEE evenness index)	-0.0387		-0.01
Organizational concentration (percent public benefit)	0.0006	**	0.03
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	0.0001	***	0.11
Small retail (establishments per 10,000 residents)	-0.0001	*	-0.04
Small manufacturing (establishments per 10,000 residents)	-0.0005	**	-0.04
Percent in civically engaged denominations	0.0014	***	0.14
CONTROL ITEMS			
Percent unemployed	-0.0274	***	-0.40
Percent Hispanic	-0.0005	*	-0.03
Percent Black	-0.0023	***	-0.15
Percent with at least a high school education	0.0033	***	0.14
Urban Influence (Large metro reference)			
Small metro area	-0.1480	***	-0.25
Micropolitan adjacent to large metro area	-0.1920	***	-0.14
Noncore adjacent to large metro area	-0.1950	***	-0.16
Micropolitan adjacent to small metro area	-0.2220	***	-0.27
Noncore adjacent to small metro area, with town	-0.2430	***	-0.42
Noncore adjacent to small metro area, no town	-0.2180	***	-0.21
Micropolitan area not adjacent to a metro area	-0.2410	***	-0.28
Noncore adjacent to micro area, with town	-0.2640	***	-0.27
Noncore adjacent to micro area, no town	-0.2660	***	-0.27
Noncore not adjacent to metro/micro area, with town	-0.2580	***	-0.21
Noncore not adjacent to metro/micro area, no town	-0.2930	***	-0.27
Congregational density (congregations per 10,000 residents)	-0.0060	***	-0.43
Adherence rate (adherents per capita)	0.0590	***	0.06
Constant	10.78	***	
Observations	3,062		
Adjusted R-squared	0.675		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table B3: Negative Binomial Regression of Homicide Using NCCS Updated Data

VARIABLES	***b***	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	0.0131	***
Organizational diversity (diversity index)	0.1240	***
Organizational evenness (NTEE evenness index)	0.4690	
Organizational concentration (percent public benefit)	0.0098	***
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0004	*
Small retail (establishments per 10,000 residents)	0.0002	
Small manufacturing (establishments per 10,000 residents)	-0.0039	**
Percent in civically engaged denominations	-0.0095	***
CONTROL ITEMS		
Median household income	0.0000	***
Percent unemployed	0.0017	
Percent Hispanic	0.0122	***
Percent Black	0.0189	***
Percent with at least a high school education	-0.0067	**
Urban Influence (Large metro reference)		
Small metro area	-0.2040	***
Micropolitan adjacent to large metro area	-0.4490	***
Noncore adjacent to large metro area	-0.2940	*
Micropolitan adjacent to small metro area	-0.4170	***
Noncore adjacent to small metro area, with town	-0.4890	***
Noncore adjacent to small metro area, no town	-0.2750	
Micropolitan area not adjacent to a metro area	-0.5180	***
Noncore adjacent to micro area, with town	-0.4410	**
Noncore adjacent to micro area, no town	-0.4400	*
Noncore not adjacent to metro/micro area, with town	-0.5220	**
Noncore not adjacent to metro/micro area, no town	-0.1910	
Congregational density (congregations per 10,000 residents)	-0.0202	***
Adherence rate (adherents per capita)	0.0552	
Constant	-10.2700	***
Observations	3,062	
Likelihood ratio chi-square	1115.89	***
Pseudo R squared	0.1229	

Note: *** p<0.001, ** p<0.01, * p<0.05

Table B4: Negative Binomial Regression of Infant Mortality Using NCCS Updated Data

VARIABLES	*b*	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	-0.0003	
Organizational diversity (diversity index)	0.0013	
Organizational evenness (NTEE evenness index)	0.1263	
Organizational concentration (percent public benefit)	-0.0019	
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0004	***
Small retail (establishments per 10,000 residents)	0.0002	
Small manufacturing (establishments per 10,000 residents)	-0.0006	**
Percent in civically engaged denominations	-0.0016	***
CONTROL ITEMS		
Median household income	0.0000	**
Percent unemployed	-0.0127	***
Percent Hispanic	-0.0033	***
Percent Black	0.0083	
Percent with at least a high school education	-0.0004	
Urban Influence (Large metro reference)		
Small metro area	-0.0110	
Micropolitan adjacent to large metro area	-0.0344	
Noncore adjacent to large metro area	-0.0535	
Micropolitan adjacent to small metro area	-0.0388	
Noncore adjacent to small metro area, with town	-0.0446	
Noncore adjacent to small metro area, no town	-0.0307	
Micropolitan area not adjacent to a metro area	-0.0497	
Noncore adjacent to micro area, with town	-0.0239	
Noncore adjacent to micro area, no town	-0.0141	
Noncore not adjacent to metro/micro area, with town	-0.0690	
Noncore not adjacent to metro/micro area, no town	0.1182	
Congregational density (congregations per 10,000 residents)	-0.0026	
Adherence rate (adherents per capita)	-0.0415	
Medical Professional Shortage Area	-0.0082	
Constant	-4.1201	***
Observations	3,062	
Likelihood ratio chi-square	922.44	***
Pseudo R squared	.0860	

Note: *** p<0.001, ** p<0.01, * p<0.05

APPENDIX C. EXPLORATORY ANALYSES OF SMALL NONPROFITS

Table C1: OLS Regression of Family Poverty (primary dataset)

VARIABLES	*b*		β
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	-0.0010	*	-0.05
Organizational diversity (NTEE diversity index)	0.0267	**	0.05
Organizational evenness (NTEE evenness index)	0.0808		0.01
Organizational concentration			
Percent public benefit	-0.0024	**	-0.05
Percent small organizations	-0.0026	*	-0.04
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	-0.0002	**	-0.07
Small retail (establishments per 10,000 residents)	0.0000		-0.01
Small manufacturing (establishments per 10,000 residents)	0.0002		0.01
Percent in civically engaged denominations	-0.0046	***	-0.23
CONTROL ITEMS			
Percent unemployed	0.0681	***	0.46
Percent Hispanic	0.0065	***	0.16
Percent Black	0.0060	***	0.19
Percent with at least a high school education	-0.0077	***	-0.16
Urban Influence (Large metro reference)			
Small metro area	0.1900	***	0.16
Micropolitan adjacent to large metro area	0.2610	***	0.09
Noncore adjacent to large metro area	0.2520	***	0.10
Micropolitan adjacent to small metro area	0.2560	***	0.15
Noncore adjacent to small metro area, with town	0.2490	***	0.16
Noncore adjacent to small metro area, no town	0.2430	***	0.12
Micropolitan area not adjacent to a metro area	0.2410	***	0.14
Noncore adjacent to micro area, with town	0.2520	***	0.13
Noncore adjacent to micro area, no town	0.2940	***	0.14
Noncore not adjacent to metro/micro area, with town	0.2800	***	0.11
Noncore not adjacent to metro/micro area, no town	0.4340	***	0.15
Congregational density (congregations per 10,000 residents)	0.0080	***	0.21
Adherence rate (adherents per capita)	-0.0874	*	-0.04
Constant	2.4700	***	
Observations	3,061		
Adjusted R-squared	0.622		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C2: OLS Regression of Median Household Income (primary dataset)

VARIABLES	*b*		β
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	0.0001		0.01
Organizational diversity (NTEE diversity index)	-0.0031		-0.01
Organizational evenness (NTEE evenness index)	0.0245		0.00
Organizational concentration			
Percent public benefit	0.0017	***	0.07
Percent small organizations	0.0001		0.01
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	0.0001	***	0.11
Small retail (establishments per 10,000 residents)	0.0000		-0.03
Small manufacturing (establishments per 10,000 residents)	-0.0005	***	-0.04
Percent in civically engaged denominations	0.0016	***	0.16
CONTROL ITEMS			
Percent unemployed	-0.0276	***	-0.40
Percent Hispanic	-0.0007	**	-0.04
Percent Black	-0.0024	***	-0.15
Percent with at least a high school education	0.0035	***	0.15
Urban Influence (Large metro reference)			
Small metro area	-0.1440	***	-0.24
Micropolitan adjacent to large metro area	-0.1870	***	-0.13
Noncore adjacent to large metro area	-0.1900	***	-0.15
Micropolitan adjacent to small metro area	-0.2160	***	-0.26
Noncore adjacent to small metro area, with town	-0.2380	***	-0.41
Noncore adjacent to small metro area, no town	-0.2150	***	-0.21
Micropolitan area not adjacent to a metro area	-0.2350	***	-0.28
Noncore adjacent to micro area, with town	-0.2580	***	-0.26
Noncore adjacent to micro area, no town	-0.2600	***	-0.26
Noncore not adjacent to metro/micro area, with town	-0.2520	***	-0.21
Noncore not adjacent to metro/micro area, no town	-0.2880	***	-0.27
Congregational density (congregations per 10,000 residents)	-0.0058	***	-0.42
Adherence rate (adherents per capita)	0.0656	***	0.06
Constant	10.68	***	
Observations	3,065		
Adjusted R-squared	0.675		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C3: Negative Binomial Regression of Homicide (primary dataset)

VARIABLES	***b***	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	0.0039	**
Organizational diversity (diversity index)	0.0913	*
Organizational evenness (NTEE evenness index)	1.1710	
Organizational concentration		
Percent public benefit	0.0144	***
Percent small organizations	-0.0018	***
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0004	*
Small retail (establishments per 10,000 residents)	0.0003	
Small manufacturing (establishments per 10,000 residents)	-0.0045	***
Percent in civically engaged denominations	-0.0084	***
CONTROL ITEMS		
Median household income	0.0000	***
Percent unemployed	0.0082	
Percent Hispanic	0.0115	***
Percent Black	0.0171	***
Percent with at least a high school education	-0.0026	
Urban Influence (Large metro reference)		
Small metro area	-0.1690	***
Micropolitan adjacent to large metro area	-0.4000	**
Noncore adjacent to large metro area	-0.2140	
Micropolitan adjacent to small metro area	-0.4690	***
Noncore adjacent to small metro area, with town	-0.4260	***
Noncore adjacent to small metro area, no town	-0.2720	
Micropolitan area not adjacent to a metro area	-0.4390	***
Noncore adjacent to micro area, with town	-0.4660	**
Noncore adjacent to micro area, no town	-0.4600	
Noncore not adjacent to metro/micro area, with town	-0.4370	**
Noncore not adjacent to metro/micro area, no town	-0.1780	
Congregational density (congregations per 10,000 residents)	-0.0169	***
Adherence rate (adherents per capita)	0.0100	
Constant	-9.7030	***
Observations	3,065	
Likelihood ratio chi-square	1145.84	***
Pseudo R squared	0.1262	

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C4: Negative Binomial Regression of Infant Mortality (primary dataset)

VARIABLES	***b***	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	-0.0007	
Organizational diversity (diversity index)	0.0121	
Organizational evenness (NTEE evenness index)	0.0073	
Organizational concentration		
Percent public benefit	-0.0029	*
Percent small organizations	-0.0040	**
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0004	***
Small retail (establishments per 10,000 residents)	0.0002	
Small manufacturing (establishments per 10,000 residents)	-0.0008	
Percent in civically engaged denominations	-0.0019	***
CONTROL ITEMS		
Median household income	0.0000	***
Percent unemployed	-0.0125	**
Percent Hispanic	-0.0029	***
Percent Black	0.0083	***
Percent with at least a high school education	0.0002	
Urban Influence (Large metro reference)		
Small metro area	-0.0047	
Micropolitan adjacent to large metro area	-0.0276	
Noncore adjacent to large metro area	-0.0359	
Micropolitan adjacent to small metro area	-0.0300	
Noncore adjacent to small metro area, with town	-0.0252	
Noncore adjacent to small metro area, no town	-0.0105	
Micropolitan area not adjacent to a metro area	-0.0316	
Noncore adjacent to micro area, with town	-0.0050	
Noncore adjacent to micro area, no town	0.0101	
Noncore not adjacent to metro/micro area, with town	-0.0449	
Noncore not adjacent to metro/micro area, no town	0.1450	
Congregational density (congregations per 10,000 residents)	-0.0018	
Adherence rate (adherents per capita)	-0.0800	
Medical Professional Shortage Area	-0.0004	
Constant	-3.7520	***
Observations	3,065	
Likelihood ratio chi-square	931.09	***
Pseudo R squared	.0867	

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C5: OLS Regression of Family Poverty (NCCS updated dataset)

VARIABLES	*b*		β
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	-0.0022	**	-0.07
Organizational diversity (NTEE diversity index)	0.0200	*	0.05
Organizational evenness (NTEE evenness index)	0.0177		0.00
Organizational concentration			
Percent public benefit	-0.0005		-0.01
Percent small organizations	-0.0014	*	-0.03
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	-0.0002	**	-0.07
Small retail (establishments per 10,000 residents)	0.0000		-0.01
Small manufacturing (establishments per 10,000 residents)	0.0002		0.01
Percent in civically engaged denominations	-0.0045	***	-0.22
CONTROL ITEMS			
Percent unemployed	0.0679	***	0.46
Percent Hispanic	0.0063	***	0.16
Percent Black	0.0061	***	0.19
Percent with at least a high school education	-0.0077	***	-0.16
Urban Influence (Large metro reference)			
Small metro area	0.1940	***	0.16
Micropolitan adjacent to large metro area	0.2660	***	0.09
Noncore adjacent to large metro area	0.2570	***	0.10
Micropolitan adjacent to small metro area	0.2620	***	0.16
Noncore adjacent to small metro area, with town	0.2530	***	0.16
Noncore adjacent to small metro area, no town	0.2500	***	0.12
Micropolitan area not adjacent to a metro area	0.2500	***	0.14
Noncore adjacent to micro area, with town	0.2560	***	0.13
Noncore adjacent to micro area, no town	0.2990	***	0.15
Noncore not adjacent to metro/micro area, with town	0.2800	***	0.11
Noncore not adjacent to metro/micro area, no town	0.4360	***	0.15
Congregational density (congregations per 10,000 residents)	0.0082	***	0.22
Adherence rate (adherents per capita)	-0.0810	*	-0.04
Constant	2.2350	***	
Observations	3,058		
Adjusted R-squared	0.621		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C6: OLS Regression of Median Household Income (NCCS updated dataset)

VARIABLES	*b*		β
NONPROFIT SECTOR INDICATORS			
Organizational density (nonprofits per 10,000 residents)	0.0008	**	0.05
Organizational diversity (NTEE diversity index)	0.0039		0.02
Organizational evenness (NTEE evenness index)	-0.0413		-0.01
Organizational concentration			
Percent public benefit	0.0007	**	0.03
Percent small organizations	0.0004		0.02
CIVIC COMMUNITY INDICATORS			
Nonemployers (establishments per 10,000 residents)	0.0001	***	0.11
Small retail (establishments per 10,000 residents)	-0.0001	*	-0.04
Small manufacturing (establishments per 10,000 residents)	-0.0005	**	-0.04
Percent in civically engaged denominations	0.0014	***	0.14
CONTROL ITEMS			
Percent unemployed	-0.0273	***	-0.40
Percent Hispanic	-0.0006	*	-0.03
Percent Black	-0.0022	***	-0.14
Percent with at least a high school education	0.0033	***	0.14
Urban Influence (Large metro reference)			
Small metro area	-0.1480	***	-0.25
Micropolitan adjacent to large metro area	-0.1910	***	-0.14
Noncore adjacent to large metro area	-0.1960	***	-0.16
Micropolitan adjacent to small metro area	-0.2210	***	-0.27
Noncore adjacent to small metro area, with town	-0.2440	***	-0.42
Noncore adjacent to small metro area, no town	-0.2200	***	-0.22
Micropolitan area not adjacent to a metro area	-0.2420	***	-0.29
Noncore adjacent to micro area, with town	-0.2650	***	-0.27
Noncore adjacent to micro area, no town	-0.2680	***	-0.27
Noncore not adjacent to metro/micro area, with town	-0.2590	***	-0.21
Noncore not adjacent to metro/micro area, no town	-0.2950	***	-0.27
Congregational density (congregations per 10,000 residents)	-0.0061	***	-0.43
Adherence rate (adherents per capita)	0.0616	***	0.06
Constant	10.7400	***	
Observations	3,062		
Adjusted R-squared	0.675		

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C7: Negative Binomial Regression of Homicide (NCCS updated dataset)

VARIABLES	***b***	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	0.0116	***
Organizational diversity (diversity index)	0.1140	***
Organizational evenness (NTEE evenness index)	0.4360	
Organizational concentration		
Percent public benefit	0.0092	***
Percent small organizations	-0.0061	*
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0004	*
Small retail (establishments per 10,000 residents)	0.0002	
Small manufacturing (establishments per 10,000 residents)	-0.0041	**
Percent in civically engaged denominations	-0.0097	***
CONTROL ITEMS		
Median household income	0.0000	***
Percent unemployed	0.0033	
Percent Hispanic	0.0127	***
Percent Black	0.0185	***
Percent with at least a high school education	-0.0055	*
Urban Influence (Large metro reference)		
Small metro area	-0.1960	***
Micropolitan adjacent to large metro area	-0.4370	**
Noncore adjacent to large metro area	-0.2690	
Micropolitan adjacent to small metro area	-0.4070	***
Noncore adjacent to small metro area, with town	-0.4620	***
Noncore adjacent to small metro area, no town	-0.2400	
Micropolitan area not adjacent to a metro area	-0.4970	***
Noncore adjacent to micro area, with town	-0.4200	**
Noncore adjacent to micro area, no town	-0.4160	
Noncore not adjacent to metro/micro area, with town	-0.4960	**
Noncore not adjacent to metro/micro area, no town	-0.1610	
Congregational density (congregations per 10,000 residents)	-0.0192	***
Adherence rate (adherents per capita)	0.0026	
Constant	-9.88	***
Observations	3,062	
Likelihood ratio chi-square	1130.29	***
Pseudo R squared	0.1245	

Note: *** p<0.001, ** p<0.01, * p<0.05

Table C8: Negative Binomial Regression of Infant Mortality (NCCS updated dataset)

VARIABLES	***b***	
NONPROFIT SECTOR INDICATORS		
Organizational density (nonprofits per 10,000 residents)	-0.0018	**
Organizational diversity (diversity index)	0.0012	
Organizational evenness (NTEE evenness index)	0.0940	
Organizational concentration		
Percent public benefit	-0.0007	
Percent small organizations	-0.0025	***
CIVIC COMMUNITY INDICATORS		
Nonemployers (establishments per 10,000 residents)	-0.0002	***
Small retail (establishments per 10,000 residents)	0.0002	*
Small manufacturing (establishments per 10,000 residents)	-0.0005	
Percent in civically engaged denominations	-0.0020	***
CONTROL ITEMS		
Median household income	0.0000	***
Percent unemployed	-0.0006	
Percent Hispanic	-0.0030	***
Percent Black	0.0072	***
Percent with at least a high school education	0.0005	
Urban Influence (Large metro reference)		
Small metro area	-0.0039	
Micropolitan adjacent to large metro area	-0.0319	
Noncore adjacent to large metro area	-0.0416	
Micropolitan adjacent to small metro area	-0.0339	
Noncore adjacent to small metro area, with town	-0.0374	
Noncore adjacent to small metro area, no town	-0.0284	
Micropolitan area not adjacent to a metro area	-0.0343	
Noncore adjacent to micro area, with town	-0.0165	
Noncore adjacent to micro area, no town	-0.0201	
Noncore not adjacent to metro/micro area, with town	-0.0792	
Noncore not adjacent to metro/micro area, no town	0.0966	
Congregational density (congregations per 10,000 residents)	-0.0009	
Adherence rate (adherents per capita)	-0.0462	
Medical Professional Shortage Area	0.0132	
Constant	-4.227	***
Observations	3,062	
Likelihood ratio chi-square	1416.98	***
Pseudo R squared	.0750	

Note: *** p<0.001, ** p<0.01, * p<0.05

VITA

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