

Nonprofit Sector Growth and Density: Testing Theories of Government Support

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ABSTRACT

Theories of nonprofit density have assumed a variety of dispositions toward the state, including opposition, suspicion, indifference, and mutual dependence. In this article, we conduct the first large-scale simultaneous empirical test of the two most prominent nonprofit theories: government failure theory and interdependence theory. The former characterizes nonprofit activities as substitute or oppositional to state programs, accounting for the limitations and failures of government-provided services and more reflective of the heterogeneity of demand for services. The latter emphasizes the more complementary and collaborative nature of nonprofit activities, focusing on the overlapping agendas of nonprofits and the state and the mutual dependency that arises from partnership. The theories are difficult to test empirically because both predict the same relationship between state capacity and the size of the nonprofit sector, albeit for theoretically distinct reasons. A true joint test requires the separation of government support from private support for nonprofits. Using a newly constructed panel dataset in which we separate out nonprofit revenue sources normally agglomerated in the Internal Revenue Service 990 data, we examine the empirical merits of both theories to answer the question of whether human service nonprofit organizations thrive when government fails or when government collaborates. Our findings suggest that government funding has a more favorable effect on nonprofit density than private donations. The findings raise several policy and management implications that need evaluation.

INTRODUCTION

Many nonprofit scholars have attempted to explain the variation in the size of the nonprofit sector across communities. Two theories have been especially prominent in the literature: government failure theory and interdependence theory. Both are theories of resource mobilization; government failure emphasizes the ability of nonprofit organizations to leverage private philanthropic support from individuals, foundations, and other organizations, whereas interdependence theory emphasizes the interconnectivity of financial support from government with the production and delivery of important goods and services by nonprofit

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organizations. In this article, we explore the importance of both kinds of resources in supporting the density of the human services nonprofit sector across metropolitan statistical areas (MSAs).¹ Here the term density means specifically the number of human services nonprofits within an MSA that filed a Form 990 during the study period of 1998–2003 and growth refers to a positive change in the number of nonprofits over that time period. Each MSA represents a distinct urban landscape with unique economic, institutional, sociopolitical, and cultural considerations where, as a result, the nonprofit sector has evolved organically in each area. By examining nonprofit density across all US MSAs, we can isolate common factors associated with the health and vitality of the nonprofit sector² in broader and generalizable terms.

Nonprofit density as a concept is of real significance to policy makers and public and nonprofit managers. On the one hand, the density of the nonprofit sector is important because as government has devolved responsibility for the production and delivery of services using a range of policy tools, especially in areas such as social and mental health services, it has often turned to nonprofit organizations as the street-level implementers (Brodkin 2007; Heinrich 2000; Sandfort 1999). The devolution of publicly funded services to nonprofits reflects the demand for alternative service provision, but it also reveals the level of community capacity and nonprofit capabilities that are necessary for these organizations to effectively produce and deliver goods and services. And yet, some scholars have found that as this devolution and transfer of service implementation have occurred, nonprofits themselves have come under pressure with respect to mission and programmatic scope creep and at times perilously exposed themselves to financial management, governance, and organizational sustainability challenges (Gazley 2008; Gazley and Brudney 2007; Smith and Lipsky 1993).

The ability of government agencies to meet the broader and more diverse needs of communities presents policy and management challenges that reflect the growth or diminution of the nonprofit sector. Some observers of governmental reform efforts suggest that the hollowing out of government (Milward and Provan 1998) and more recent efforts at insourcing responsibilities deemed to be inherently government (Hefetz and Warner 2011) presents a highly relevant and timely context for thinking about the density of the nonprofit sector. Government plays an important role in this context by encouraging and discouraging the growth and density of nonprofit organizations in MSAs through legislation and the use of policy tools.

This article empirically jointly tests the merits of the two most prominent theories—government failure theory and interdependence theory—to see which better explains observed geographic variations in nonprofit density. In doing so, we find that interdependence theory explains more growth in the human services sector of the nonprofit economy than does government failure theory. This result calls into question the validity of conclusions from the only existing panel study of nonprofit density by Matsunaga and Yamauchi (2004), which found support for government failure theory as a result of private donations.

1 An MSA is often referred to as a geographical region with a core urban area of 50,000 or more population, consists of more than one county, and has a high degree of social and economic integration with the urban core. Accessed on 17 October 2011 from <http://www.census.gov/population/metro/>

2 The use of the term “health” of the nonprofit sector primarily refers to some measure of the capacity of nonprofits to collectively meet community need or achieve a sector-wide goal. We do not mean the fiscal health of an individual organization, although this is an ingredient in the bigger picture of sector capacity.

Using a panel dataset that is more detailed than prior studies using the National Center for Charitable Statistics (NCCS) data, our findings question the heretofore conventional wisdom about nonprofit density. With these results, we explore the policy and management implications for government and nonprofits.

Background: Government Failure and Interdependence Theories

Government failure theory and interdependence theory both offer explanations for the variation in the size of the nonprofit sector across communities, but for different reasons. Government failure theory has evolved from the public choice literature in economics, which is concerned with collective action problems around the provision of public goods (Hansmann 1987). People benefit from public goods like roads and schools, but they are expensive and suffer from free-rider problems. As a result, left to the private market, such public goods would be under-provided. The government can step in though and tax citizens to provide these types of goods which are made available to all citizens and thus create a net benefit for society. Government failure theory highlights the idea that when government provides public goods like education and health care, it will select the most generic programs with the broadest appeal. This is often referred to as the median voter preference where government seeks to meet majoritarian, homogeneous demand for goods and services that are deemed to be “public” (Douglas 1987). But, if societies are diverse and have heterogeneous preferences for goods and services, then secondary markets for such services may develop. To the extent that individuals and organizations are willing to pay for these goods and services and profits can be generated, commercial, for-profit proprietary firms will seek to meet the demand within the marketplace. Le Grand (1991) suggests that much of the work on government failure has focused on the disconnect between costs and revenues because of inefficiencies associated with providing nonmarket activities in the absence of a price mechanism but that a more relevant issue may be the disconnect between incentives and agents. However, where the services and goods do not readily translate to a firm’s ability to maximize shareholder profits, then such services in varying markets will be largely undergirded by sponsorship from niche interest groups. This sponsorship by donors often results from their personal reluctance to give money that would be partially retained as profits by for-profit firms. As a result, the nonprofit organizational form is a natural one; the board governance mechanisms and tax code–induced nondistribution constraint associated with the nonprofit form are said to be more fundamentally aligned with public interests and governmental goals.

The basic prediction of government failure theory is that community diversity generates more demand for nonprofit activities in these secondary markets. As demand increases, so too does financial sponsorship from private donors, foundations, and other organizational resources, leading to greater but varying levels of nonprofit density. One corollary of this theory is that nonprofit activity is largely funded by niche interest groups and not government grants. The argument, one that has a long history in the literature on nonprofit organizations, is that nonprofits serve as supplements to government because they satisfy needs left unfulfilled by government (see Gronbjerg 1993; Hansmann 1987; Luksetich 2008; Salamon 1987; Young 2000a). Another corollary is that the size of the nonprofit sector is inversely related to the capacity of government programs that address diverse needs of the public (Douglas 1987; Smith and Gronbjerg 2006). More recent work (Gazley 2008, 2010; Sandfort 1999; Twombly 2003 among others) suggests that government’s capacity to produce and deliver

services may become impeded because of political priorities, reform efforts focused on policy and program decentralization, and a recognition that nonprofits may possess both more expertise and evidence-based models of intervention. A common outcome then is that the public sector may come to rely more heavily on market-based alternatives to service provision by nonprofits and reduce their own internal program capacity (Gazley and Brudney 2007; Sandfort et al. 2008; Van Slyke 2003).

Interdependence theory tells a different story. Demand heterogeneity might induce private donations, but it is questionable whether private donations alone are enough to drive nonprofit density. Rather, the government recognizes that nonprofit theatres, schools, hospitals, and social service agencies benefit the community in different ways. As a result, government is often willing to fund and even subsidizes the range of activities these organizations provide when viable nonprofit agencies emerge (Salamon 1987). More so, government agencies may willingly delegate the production of goods and delivery of services that are aligned with public priorities, programs, and entitlements to the nonprofit sector in order to minimize costs, improve quality, leverage expertise, or increase confidence among citizens and service users because of the perception that government is inefficient or ineffective at meeting diverse heterogeneous needs (Milward and Provan 2000). As a result, governments can over time become dependent upon nonprofit organizations to provide services that meet entitlements and to pursue a social policy agenda that may be aligned with public goals and priorities. At the same time, nonprofit organizations that are recipients of public funding can begin to rely on those monies and perhaps become dependent on this source of revenue to fulfill its mission and maintain its scope of activity.

The more hollowed out that government becomes in providing services the greater the likelihood that it will reallocate scarce financial resources to nonprofit organizations using a variety of policy instruments and revenue forms. In reallocating its resources and seeking organizational alternatives for the production and delivery of goods and services, government uses nonprofit organizations to augment its own capacity and to serve as substitutes in meeting distinct and heterogeneous needs for which it lacks expertise, client access and proximity, and political influence. Brooks (2000) asserts that government may elect to use nonprofit organizations because of the ability to leverage diverse sources of philanthropic support that can supplement the traditional limitations on governmental appropriations and funding. These policy tools and revenue forms can take the form of contracts, vouchers, grants, loan guarantees, tax expenditures, and credits, among others (Salamon 2002). We know from a recent Urban Institute study (Boris et al. 2010) that a large proportion of nonprofit program revenue indeed comes from government sources—roughly \$100 billion in contracts per year. Interdependence theory predicts that increasing government support for nonprofits will in turn increase density. The causal pathway might work through the absolute increase in resources, but it may also work through a signal of potential revenue stability because of the presence of government subsidies. The theory is agnostic, however, on the role of private donations and foundation support. The use of policy tools to ensure nonprofit performance (Sandfort, Selden, and Sowa 2008) and the stability of nonprofits as a result of revenue diversification (Carroll and Stater 2009) both suggest that the relationship between government funding and nonprofit organizations is complex.

There is active debate about the effects of government funding on the nonprofit sector. Some scholars have argued that government support of nonprofit organizations and their activities can crowd out or reduce the level of private philanthropic contributions because of less perceived need for private philanthropy (Andreoni 1993; Bergstrom, Blume, and Varian 1986; Duncan 1999; Warr 1982). Others (Rose-Ackerman 1982; Schiff 1985; Seaman 1981) have found that government funding can actually crowd in or attract and leverage sources of private philanthropic support because government funding of nonprofit activity is seen as a signal of quality and credibility. Brooks (2000) found that government funding of nonprofit activity can have more dynamic results, both in crowding-out and crowding-in resources depending on the level, amount, and frequency of government funding and the subsector of the nonprofit economy to which the funding is directed. Specifically, government funding of nonprofit organizations involved in arts and cultural programming can leverage private philanthropic dollars up to a certain threshold, whereas if funding goes past a certain point, nonprofits may begin to resemble ‘quasi-public agencies’ and as a result government funding can have a crowding-out effect. In other cases, government funds crowd out private donations through a decrease in the average donation size but crowd in private donations through an increase in the number of givers, thus having a net zero effect on the private funds available to nonprofits while still growing the stream of government grants or contracts (Brooks 2003). The major caveats behind past research on crowding out is that it focuses on the fungibility of one dollar in government grants versus a dollar of private grants but does not tie these resource streams to sector capacity. Much of the literature also focuses on arts and culture subsectors, whereas it may have little to say about the human services portion of the nonprofit economy, especially given recent trends in downsizing of government programs (Peters 1994) and fiscal uncertainty brought on by record deficits that are straining social safety net programs (Stid and Shah 2012).

The specific emphasis on government failure and interdependence in this article has evolved to address two shortcomings in the literature. First, the last large-scale empirical test of government failure theory was conducted by Matsunaga and Yamauchi (2004). Using the updated “digitized” NCCS dataset, we show that their conclusions were incorrect because of limitations in the data they had at the time. Second, we wish to provide some context for the crowding-out debate, which suggests that government funds can harm nonprofits by chasing away private donations. We wish to emphasize the simple point that in nonprofit density terms, a dollar of private donations does not equal a dollar of government grants in terms of creating opportunities for sustainability and growth. Government failure and interdependence theories are not the only theories that could be used to examine nonprofit density. Public choice theories and those of voluntary failure could also be used along with more recent work on transaction costs (Brown and Potoski 2004) and policy instruments (Salamon 2002). In addition, more recent work on ecological approaches to density as a function of networked service provision is also promising (Potter and Crawford 2008). Young (2000a) also offers a categorization in which nonprofits serve as supplements, complements, and adversaries to government. Just as government failure theory and interdependence theory can be complimentary, these theories are also not meant to be mutually exclusive.

Testing government failure and interdependence theories jointly requires a dataset that separates government funding from private donations. In the past, this has been very

difficult because the most widely used nonprofit database, the NCCS dataset of IRS 990 financial data, combined these two variables into a single “public support” category. As a result, most empirical studies have tested these theories separately and in doing so often found support for government failure theory (see Matsunaga and Yamauchi 2004) when in fact it may have been government grants driving the results. The exception is Salamon, Sokolowski, and Anheier (2000). They conducted a cross-country comparative analysis across 40 nations, measuring nonprofit density as the ratio of nonprofit employment to overall employment within each country, and concluded that interdependence theory is supported by the data, whereas government failure is not. The study was limited in that it relied on cross-sectional data and did not have a large-enough sample for rigorous statistical analysis.

The NCCS has created a refined digitized dataset that separates these variables and allows for an examination of domestic nonprofit density in the United States. We employ the NCCS data combined with a range of control variables from census data to examine the merits of these theories together. Work was also done to restructure the raw database into geographic units so that density questions could be tested. The goal of such a study is to refine the theoretical understanding of the factors leading to a robust and sustainable nonprofit sector and specifically to highlight whether the relationship with the government sector is adversarial or complementary to the issue of nonprofit density. In doing so, we find a compelling case for interdependence theory and weak support of the idea that government failure theory explains growth of the nonprofit sector. This line of research is foundational for the design of policy tools that can assist policy makers in supporting the growth or shrinkage of the nonprofit sector in their communities.

PREVIOUS RESEARCH

There is a small and growing collection of empirical work on nonprofit density. Eight prominent studies published in peer-reviewed journals are reviewed here.³ These studies all represent large-scale empirical efforts in geographic units ranging from 285 metropolitan centers (Corbin 1999) to 284 US counties (Saxton and Benson 2005), 50 states (Matsunaga and Yamauchi 2004), and 40 countries (Salamon, Sokolowski, and Anheier 2000). They all share nonprofit density as a dependent variable, measured as a count of nonprofits in a geographic region (Corbin 1999; Gronbjerg and Paarlberg 2001), the density of nonprofits in relation to population (Matsunaga and Yamauchi 2004), nonprofit employment as a proportion of total employment (Salamon, Sokolowski, and Anheier 2000), or the count of nonprofits that have programming in schools across districts (Paarlberg and Gen 2009). Independent variables include socioeconomic characteristics of the community, measures of social capital, and religious activity in a community, philanthropic propensity (volunteering or giving), and spending on social services.

The studies address at least five theories of nonprofit formation: government failure theory, social capital theories of associational life, theories of the ties between religious organizations and the size of civil society, philanthropy theory, and interdependence theory. Each theory is discussed in turn below. Two control variables were common to most of the studies and proved to be important. Community need, as measured generally by poverty

3 These studies were identified by searching for “nonprofit density” and “nonprofit growth” in academic databases and also through familiarity with the literature. The list is meant to be representative but not exhaustive.

rates or unemployment, is associated with higher nonprofit density. Higher average income of citizens in a community is also associated with higher nonprofit density.⁴

Government Failure and Heterogeneous Demand Theories

Government failure theory evolved out of work on market failure in public economics and was a prominent theory of nonprofits in the 1970s and 1980s (Weisbrod 1977, 1991; Young 2000b).⁵ It states that a government has limits on the amount of “quasi-public goods” such as social services it can provide for citizens, so the services it provides are usually in line with the preferences of the median voters in a society. When a society is diverse, though, the median voter preferences may not be sufficient to satisfy the demand of different groups for different social services. Catholic parents prefer Catholic schools, for example, and Jewish parents desire Jewish daycares. Wealthy individuals demand museums of fine art and opera, whereas a bohemian college population has a taste for modern art and theatre. Preferences that result from diversity in a society are referred to as heterogeneous demand, which are assumedly met through the incorporation of specialized nonprofits. The theory is tested by correlating diversity in a community with the number of nonprofits that operate in that community. Studies included variables of racial diversity (Corbin 1999; Matsunaga and Yamauchi 2004), religious diversity (Salamon, Sokolowski, and Anheier 2000), and immigrant populations (Paarlberg and Gen 2009). Racial and religious diversity were not found to be drivers of nonprofit density except as a slightly significant variable in Corbin (1999). Corbin’s result may be nuanced, though, as Ben-Ner and Van Hoomissen (1992) found that racial diversity was positively related to the number of nonprofit schools but negatively related to the number of social service agencies. Paarlberg and Gen (2009) also find that racial diversity is not associated with more nonprofit involvement with schools, but the size of the immigrant population is. Overall, with the exception of Matsunaga and Yamauchi (2004), the empirical studies do not provide a strong basis for government failure as a general theory of nonprofit density and the theory has come under attack (Salamon

4 This itself is an interesting finding because it suggests that economic heterogeneity is an important driver of nonprofit density, although government failure theory tends to focus on community characteristics like racial and religious diversity. For a good reference on the relationship between income level and philanthropic giving, refer to Julian Wolpert’s (1993) book, *Patterns of Generosity* published by The Twentieth Century Fund.

5 The terminology of government failure theory does not reflect the current state of public administration research. It is no longer asserted that the government lacks capacity in social sectors merely because of a median voter phenomenon. Rather, citizens demand market-based solutions to complex social problems that entail decentralized governance and networked arrangements with third-party providers. Governments often perform make-versus-buy calculations to decide whether they will use third parties to produce and deliver services or find alternative direct government mechanisms for provision. The calculus of that decision is a composite, in most cases, of considerations about cost, quality, expertise and experience, user accessibility and satisfaction, and whether the service is deemed inherently governmental (Brown, Potoski, and Van Slyke 2006). If the government concludes the service is not inherently governmental and that it can achieve as good of results, if not better, by using a third party, it will often do so. There is a rich literature on government motivations to contract for service delivery (Brodtkin 2007; Gazley 2008). The negative terminology associated with “failure” comes from an era where nonprofit and government scholars operated in an environment of mutual suspicion. Smith and Lipsky (1993), for example, refer to the intertwined nature of government and nonprofits as a Faustian bargain. Government scholars place a negative emphasis on the need to rely on nonprofits (e.g., the state has been “hollowed” out), and nonprofit scholars tend to loathe the idea of reliance on the state because it diminishes a core nonprofit function of civil society organizations standing firmly between the citizen and the state. When a nonprofit has a close relationship to the state, it signals to some critical theorists that civil society has been co-opted, a view increasingly prevalent in current and former communist countries (see *Economist* 2011, 4, “A Special Report on the Future of the State,” March 19).

1987; Salamon, Sokolowski, and Anheier 2000) as a legitimate means of understanding why some communities have more nonprofits and others less.

Social Capital Theory

Social capital refers to networks of civic engagement that engender high levels of reciprocity and trust and has been correlated to a variety of societal outcomes such as cohesiveness, happiness, democratic participation, voluntary participation, and wealth (Putnam 2001, 1993).⁶ Social capital surveys are a recent development so these variables have not been available to many of the studies. Only one study employs social capital theory (Saxton and Benson 2005), and it is not a true density model since the authors employ the number of new nonprofits as the dependent variable. The study is notable, though, in the effect size of social capital variables versus other environmental variables like government spending. A one standard deviation increase in social capital, for example, results in more than a doubling of the nonprofit creation rate. Surprisingly, political engagement and bridging social capital are related to rates of nonprofit creation, but interpersonal trust is not.

Religious Activity

Religious activity is slightly different than community diversity—activity refers to the total number of places of worship and members, not the number of different religious groups. Religion has always had strong ties to charitable activities and is also a strong predictor of volunteerism (Brooks and Wilson 2007), so one might surmise that regions with more religious activity would also have more nonprofits. But results are mixed. James (1987) finds a positive association with evangelism and nonprofit activity and Corbin (1999), who does the most thorough job of measuring religious activity in metropolitan areas, finds a positive relationship with nonprofit density. Gronbjerg and Paarlberg (2001), though, did not. Most studies did not include religious activity so the debate about the relationship between nonprofit density and religious activity remains an open issue.

Philanthropic Propensity

Since a significant proportion of nonprofit revenues come from private donations, one would expect that the philanthropic propensity of a community would be positively related to nonprofit density. The research summarily finds, though, that this is not the case. Corbin (1999) uses a regional philanthropic scale in his study and finds no significance in correlation. Gronbjerg and Paarlberg (2001) use private support for libraries within the county as a proxy variable for philanthropic propensity and also find no statistical relationship. Salamon, Sokolowski, and Anheier (2000) find a statistical relationship, but in the negative direction—higher rates of philanthropy in a society are associated with lower nonprofit density. This is especially surprising since per capita income is positively related to nonprofit density, leaving one to ponder the mechanism by which wealth reaches nonprofits if it is not a philanthropic one. Do wealthier communities pay more in taxes, indirectly supporting nonprofits through government–nonprofit interdependence? Or perhaps wealthier

6 Putnam's interpretation of the concept of social capital is one among many others. Scholars such as Bourdieu (1983) and Coleman (1988) have also made significant contributions to the study of social capital.

communities have more social capital, creating the necessary conditions for nonprofits to incorporate and survive? Whatever the causal pathway, the density literature does not find philanthropic propensity to be at the heart of nonprofit density.

Interdependence Theory

Salamon and Anheier (1998, 15) point out that “the market failure/government failure thesis that underlies the heterogeneity and supply-side theories take as given that the relationship between the nonprofit sector and the state is fundamentally one of conflict and competition. The persistence of a nonprofit sector, in this view, is a byproduct, at best, of inherent limitations of the state; and, at worst, of successful resistance to efforts by the state to obliterate socially desirable bases of pluralism and diversity.” Interdependence provides theoretical space for a more collaborative relationship between nonprofits and the government (Gazley 2010; Saidel 1991). It asserts that government and nonprofits often forge partnerships, and in doing so, they become interdependent—the government lacks capacity and is dependent upon the nonprofit sector for expertise and institutional memory and the nonprofit sector is dependent upon the government for funding. Interdependence theory and the specific version proposed by Salamon and Anheier (1998) called “social origins theory” (Salamon 2002) currently have the most currency in nonprofit sector research and are also most consistent with the move in public administration theory toward collaborative governance (O’Leary and Bingham 2009).

Interdependence theory garners the strongest support within the existing empirical work because of the consistent results that more government spending in social services leads to higher nonprofit density. This conclusion holds true across various units of geographic aggregation domestically (Corbin 1999; Gronbjerg and Paarlberg 2001; Luksetich 2008) and also in cross-national comparative work (Salamon, Sokolowski, and Anheier 2000). The result is tantamount to a collaborative governance framework⁷ because it demonstrates that the nonprofit sector is responsive to government subsidization. It is an important result because it supports the proposition that some policy instruments may support nonprofit density versus a complete reliance on indigenous factors of nonprofit capacity (i.e., density being explained entirely by the specific traits of the communities in which nonprofits reside).

The “theory” results from past studies are summarized in table 1 and discussed below. This article focuses on the two most prominent theories in the literature—government failure and interdependence theory—since they are the most compelling and oft-cited.⁸ A joint test of these theories requires four specific things. First, a measure of government capacity

7 An alternative to thinking about interdependence theory may be to focus on some of the contemporary work on “collaborative governance theory” in line with current research in public administration (see O’Leary and Bingham 2009). Interdependence has been viewed as an important variable and condition of collaborative governance. More recent work by Emerson, Nabatchi, and Balogh (2012) defines collaborative governance as “the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private, and civic spheres in order to carry out a public purpose that could not otherwise be accomplished.” This is a broader definition and one that builds on the contribution of Ansell and Gash (2008) as well as those of McGuire (2006) and Huxham and Vangen (2005) while recognizing within public administration that interdependence is an important component of collaborative governance.

8 See Brown and Ferris (2007). The work of Brown and Ferris finds that social capital, individual involvement with associational networks, and norms of trust and participation has a highly nuanced relationship with religiosity and philanthropy.

Table 1
Research Variables Included in Previous Empirical Studies on Nonprofit Density

| | Control Variables | | | Interdependence or Government Failure? | | | | Alternative Theories | | |
|--------------------------------|--------------------|----------------------|----------------|--|---------------------|-----------------------|--------------------|----------------------|------------------------|---------------------------|
| | Community Need (+) | Community Wealth (+) | Population (+) | Community Diversity (+) | Government Size (-) | Government Grants (+) | Private Grants (+) | Social Capital (+) | Religious Activity (+) | Philanthropic Culture (+) |
| Corbin (1999) | Y | Y | | Y | | | | | Y | N |
| Gronbjerg and Paarlberg (2001) | Y | Y | X | N | | N | | | N | N |
| Salamon and Anheier (1998) | | | | N | | Y | N | | | |
| Matsunaga and Yamauchi (2004) | Y | N | X | N | Y | | Y | | | |
| Saxton and Benson (2005) | N | Y | X | | N | | | Y | | |
| Paarlberg and Gen (2009) | N | Y | X | Y | Y | | | | | |
| Luksetich (2008) | | Y | X | | N | Y | | | | |

Note: Community need is measured by poverty or unemployment rates. Community wealth is measured by per capita income. Population is controlled by including population as a variable or by using per capita measures for other variables. Community diversity can be measured by race, religion, or age demographics. Generally, race and religion have not been significant predictors. All four variables within the box are needed to test interdependence theory and government failure theory jointly. “Y” indicates a significant finding in the direction predicted by theory. “N” indicates a nonsignificant finding. “X” indicates that population was used as a control variable.

is needed since both theories indicate a negative relationship between the size of government and the size of the nonprofit sector. Second, government failure theory predicts that demand heterogeneity for social services will induce private donations, so a measure of community diversity (which serves as a proxy for demand) and a measure of private donations are needed. Finally, interdependence theory suggests that increases in government funding of the nonprofit sector will lead to a larger nonprofit sector, so a measure of government support for nonprofits is needed. These four variables are boxed in table 1 to show that no studies to date have performed a true joint test. It was not possible to test all the nonprofit theories in one model in this study for reasons of theoretic parsimony and data availability. Social capital, religiosity, and philanthropic propensity are not included in this study because of data limitations.

DATA

This study draws on two primary data sources. Information on nonprofits and nonprofit resources is accessed through the NCCS digitized dataset. NCCS maintains the largest repository of nonprofit financial data collected from the IRS 990 tax forms. The database contains the vast majority of 501c(3) nonprofit organizations registered in the United States with revenues above \$25,000, and it serves as the most comprehensive source of data on the nonprofit sector.⁹ The digitized dataset is a subset of 6 years from the full NCCS database (the “core files”) that has been checked for inconsistencies and includes a variety of variables that are not part of the core files. The digitized database is available for years 1998–2003. Contextual variables were drawn from US Census data sources covering the same years.¹⁰ The nonprofit data used here have been aggregated by county in order to merge them with county-level census variables. The MSA serves as the unit of analysis for the study through the use of MSA-level fixed effects.¹¹ This unit of analysis is more granular than previous research which examined density at the state level (Matsunaga and Yamauchi 2004) or at the country level (Salamon, Sokolowski, and Anheier 2000).

The analysis was limited to human services organizations for a variety of reasons. It is the largest subsector of the nonprofit economy accounting for 34% of all nonprofit organizations (Pollak 2007).¹² It has roots in the unique American form of civil society described by de Tocqueville and other scholars. It has received a great deal of attention due to its strategic importance to the social safety net and the amount of government mandates that depend on nonprofits for implementation Boris et al. 2010. It is a sector that receives large proportions of funding from private contributions, government grants, and program service revenues allowing for an analysis of the independent effects of each of these revenue streams on nonprofit density. But most importantly, resources have a geographic scope meaning that grants given to a specific human services nonprofit will likely be used for

9 Only those nonprofits that have more than \$25,000 in revenue are required to file the IRS Form 990 for reporting. Recent work by Gronbjerg et al. (2010), however, documents limitations of the IRS registration system for nonprofits.

10 Census data were obtained from the archive at <http://www2.census.gov/prod2/statcomp/usac/excel/>. Variable names mentioned below match the dictionary in the file “Mastdata.xls.”

11 The MSA includes the metropolitan center as well as outlying communities.

12 The health care sector has one-third as many organizations but more than four times the revenues, but it is an outlier in the nonprofit economy due to the revenues of hospitals. <http://www.urban.org/uploadedpdf/>

311373_nonprofit_sector.pdf

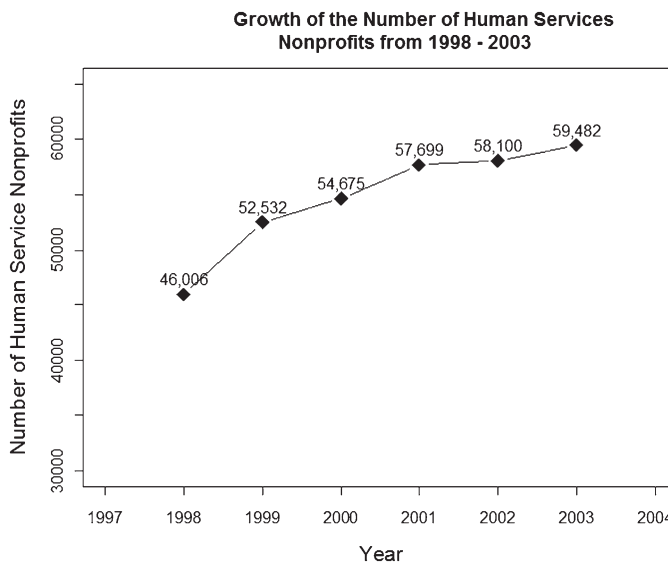
programs within the metropolitan area.¹³ Nonprofit density studies are not as meaningful for an organization like the American Cancer Society which is located in one community but receives funding on a national level and implements programs outside of the specific community in which it is located. The selection of human services was made to minimize these kinds of organizations in the sample.

The variables in the study are defined in the following ways:

Nonprofit density—The number of human service nonprofits operating within each county for each time period. This variable is constructed by counting the number of nonprofits that file 990s in a given county. The growth of the sector was quite remarkable over the 6-year period, expanding from 46,006 nonprofits to 59,482, which constitutes a 29% growth rate (figure 1). Measurement error could occur if organizations change locales or if organizations do not consistently file, but this kind of error is not assumed to be significant. From a statistical point of view, measurement error in the dependent variable does not bias the results, even though it does inflate standard errors.

Private support—Grants and donations given through private foundations or individual citizens. This variable is constructed by combining the NCCS digitized *direct public support* variable (P1DIRSUP) with *indirect public support* (P1INDSUP). We use the term “private” instead of public because confusion often arises since the literature sometimes refers to private individuals

Figure 1
Growth of the Number of Human Services Nonprofits from 1998 to 2003.



13 It may be that this statement is more accurate for human services nonprofit organizations than for arts and culture organizations and is likely influenced by the context of the nonprofit and the scope of services offered as a function of the organization’s mission. This is a testable hypothesis that could be addressed by others in future studies.

or foundations as the public and sometimes to government resources as *public* money. The private support variable measures a stream of income that is distinct from the direct public support that consists of those governmental monies that nonprofit organizations receive through the use of policy tools, such as contracts and grants, as well as those that come through intergovernmental transfers. Private support in the form of individual, foundation, corporate, and other forms of nongovernmental donations or grants accounts for 18.5% of nonprofit revenues in the dataset.

Government grants—Grants given through government sources and reported by the nonprofit on their IRS 990 forms. Note the distinction between government grants and other types of government funding (contracts and reimbursements). Grants are a distinct category (PIGOVGT) and account for 22.5% of nonprofit revenues in the dataset.

Nonprofit revenues—Earned revenues come through direct fee-for-service arrangements or through reimbursement programs such as Medicaid. Many nonprofit activities are funded through government programs but the IRS 990 form does not require the nonprofit to differentiate the source of revenue. As a result, this variable includes both resources that come directly from beneficiaries (as in the form of fee payments or use of vouchers, i.e., child care, substance abuse counseling) and those that come from third-party payers such as government programs. This variable is a composite from three revenue streams included in the digitized data—program service revenues (PIPSREV), membership dues (PIDUES), and investments (PIINVST). Program revenues account for 59% of nonprofit revenues in the dataset.

Income subsidies—Income subsidies are direct cash transfers given to individual citizens for social security payments, unemployment, retirement, welfare, and other government programs. This variable is constructed by combining the census variables for direct federal payments for individuals like social security and retirement (FED1201*** and FED1301***) and other direct payments to individuals (SPR010***).

Government wages—We include government wages as a proxy measure for the size of the government operating in the county. The variable in the model is a linear composite of the census variables for local government salaries (GEE320***), federal government salaries (FED170***), and other government employment (GEE020***).

Federal government programs—This census variable (FED110***) measures the amount spent on federal programs in each county. Federal programs can be implemented directly by the county, by nonprofits, or by private contracts. As such, this variable provides another measure of the size of government programs in the community, although there is going to be some amount of measurement error due to the fact that some of these funds are going to nonprofits.

Federal government grants—Another census variable measuring the amount of grants spent in each county during the fiscal year (FED150***). There is potential for this variable to be highly correlated with the nonprofit revenue stream also representing government grants as both variables are measuring the same latent construct, but it is included in the model since both variables are significant even after controlling for the effects of the other.

Population—The population of a county during a given time period. Other studies have incorporated population into the analysis by using a per capita measure of nonprofits. We believe that this formulation is problematic because of potential economies of scale that enable nonprofits to reach more people in denser and more urban areas. As a result, nonlinear relationships

between the population and the number of nonprofits in an MSA can be expected. The population variable and its square are included in the model to account for these dynamics instead of forcing a per capita functional form on the dependent variable, which disallows nonlinear trends. Population is in units of tens of thousands of individuals.

ESTIMATING A MODEL OF NONPROFIT DENSITY

This analysis seeks to enhance understanding of the variation in nonprofit density at the city level over time. As a result, the MSA has been selected as the unit of analysis, and data from the largest 331 US MSAs are used in the model. The data are structured at the county level, but this is to enable the use of MSA fixed effects estimators, which take advantage of changes that occur at the city-wide level (table 2). This choice of modeling level precludes rural areas from the analysis, which accounts for roughly 18% of the nonprofits in the dataset. Rural nonprofits are excluded from the analysis primarily because there is concern that the processes that drive nonprofit formation in rural areas may be distinct from processes driving nonprofit density in urban areas.

Much of the previous research, with the exception of Matsunaga and Yamauchi (2004), has employed cross-sectional analysis of nonprofit density data comparing levels of density across cities. This type of analysis can be problematic when there is geographical heterogeneity or potential for influential omitted variables that can be hard to measure, both of which can cause extreme bias in the results. Panel data, however, enable the use of estimation techniques that can account for both of these factors. A fixed effects model is estimated here, resulting in an identification strategy that relies on variation within each city over time. Fixed effects models have the favorable characteristic that they account for any influences of time-invariant factors associated with geography, which is a potential source of bias when the unit of analysis is the city. A two-way fixed effects model accounts for both time (through year fixed effects) and geography (through city fixed effects). This strategy enables a more natural causal interpretation of the results—the number of

Table 2
Descriptive Statistics of the Variables in the Study Aggregated by MSA

| | Min | Median | Mean | Max | SD |
|--|---------|----------|----------|------------|-----------|
| Number of nonprofits | 7 | 103 | 227.9 | 2665 | 352.37 |
| Change in number of nonprofits 1998–2003 | −4 | 23 | 51.8 | 613 | 79.25 |
| Private grants/donations | \$0.44 | \$19.88 | \$66.16 | \$1,721.75 | \$157.65 |
| Government grants | \$0.15 | \$32.56 | \$89.61 | \$1,867.32 | \$191.89 |
| Earned revenues | \$2.15 | \$64.44 | \$215.45 | \$4,919.39 | \$488.03 |
| Federal programs | \$0.28 | \$2.14 | \$5.06 | \$97.00 | \$9.06 |
| Federal grants | \$0.03 | \$0.39 | \$1.10 | \$25.60 | \$2.18 |
| Income subsidies | \$0.18 | \$1.18 | \$2.58 | \$32.20 | \$3.94 |
| Government wages | \$0.02 | \$0.22 | \$0.67 | \$28.54 | \$1.78 |
| Median household income | \$2,540 | \$20,878 | \$25,240 | \$60,881 | \$14,451 |
| Population | 57,156 | 345,661 | 783,284 | 11,652,115 | 1,273,919 |
| Poverty rate (%) | 4.4 | 11.1 | 11.6 | 32.8 | 4.3 |
| Violent crimes | 0 | 319 | 2,497 | 125,978 | 9,571 |
| Total high school enrollment | 9,264 | 58,285 | 130,534 | 2,161,957 | 213,932 |

Note: Dollar values are in millions.

nonprofits *within* a particular city increases as the resources available to nonprofits in that city increase. In using a fixed effects model, we are able to show the change in the number of nonprofits you could expect to see within a community or the growth, on average, taking place in that community.

Two variables that have proved important to previous cross-sectional analysis of nonprofit density are the religious composition of an area and demographic diversity. These variables are important to government failure theory, which predicts that diversity is positively correlated to nonprofit density. Previous studies show that religious diversity is associated with a higher number of nonprofits in a region (Corbin 1999) and other kinds of demographic diversity that may have an impact on nonprofit density (Matsunaga and Yamauchi 2004). Although we do not include specific measures of diversity variables in the model, given the short time frame of the study (6 years), it is assumed that community characteristics are more or less static across the study period. Since fixed effects remove the influence of any time-invariant variables, the city fixed effects will account for the variation in nonprofit density that result from community diversity without having to include them explicitly in the model. Other time-invariant features of cities are also accounted for, such as the distinct culture of each city, the form of city government, geographic variables, and other static characteristics.

Since the dependent variable is a count of the number of nonprofits and as a result cannot take on noninteger values, Hubert-White robust standard errors are necessary to account for the resulting heteroskedasticity of the error term. The results of the analysis are reported in table 3 below. The first two models are estimated without fixed effects in order to demonstrate the magnitude of bias that can result from pooling the data.

RESULTS

The differences in estimates across the four models demonstrate vividly the importance of including city fixed effects and controls for the size of government. Omitted variables in this model cause signs on the policy variables to change, leading to drastically different results. The changes between the pooled models (1 and 2) and the fixed effect models (3 and 4) and between Model 3 where government size is not accounted for and Model 4 where it is highlight the importance of geographic and institutional control variables. These differences may account for some of the variation that we observe in previous results of density studies. The variable for private support is most susceptible to model specification as it has the largest confidence interval and varies the most with changes in other variables. The coefficients for government grants and nonprofit revenues stay fairly constant across all four models.

There are two ways to interpret the implications of the slope estimates. First, a common way to interpret effect size in regression models is to examine a change in the outcome variable as a result of a standard deviation change in the policy variable (β standard deviation). A standard unit increase in private support (i.e., grants and donations), for example, results in an increase of 3.1 nonprofits within a county. A standard unit increase in government grants, however, results in an additional 15.6 nonprofits per county. An increase in nonprofit program revenues by one standard unit leads to an additional 45.5 nonprofits.

Alternatively, one might ask the question of how many additional dollars of a revenue source are needed to support one additional human service nonprofit per county (table 4). This is represented by the ratio $1/\beta$. From this perspective, an additional \$24.5 million are

Table 3
OLS and FE Models of the Number of Nonprofits per Community

| | Model 1—OLS | Model 2—OLS | Model 3—FE | Model 4—FE |
|--------------------------|---------------------|----------------------|-----------------------|----------------------|
| Private grants/donations | −0.0848 (0.0470) | −0.0151 (0.0502) | −0.0682 (0.0841) | 0.0409 (0.0773) |
| Government grants | 0.3793*** (0.0408) | 0.3259*** (0.0457) | 0.2862*** (0.0758) | 0.2109** (0.0842) |
| Earned revenues | 0.2635*** (0.0229) | 0.2427*** (0.0210) | 0.2753*** (0.0475) | 0.2744*** (0.0434) |
| Income subsidies | | −8.1367*** (3.1345) | | 4.3777 (7.6106) |
| Government wages | | −24.7274*** (3.7276) | | −26.6387*** (5.3217) |
| Federal programs | | 8.5047*** (1.5738) | | 4.0270 (2.7350) |
| Federal grants | | 6.1604 (4.3017) | | 8.4126 (10.7160) |
| Control variables | | | | |
| Intercept | −0.1722 (5.1378) | 2.3111 (5.4818) | −67.2087*** (16.3814) | −68.4329 (15.0530) |
| Population | 1.7319*** (0.1604) | 1.9752*** (0.2302) | 1.8178*** (0.3126) | 2.0358*** (0.4372) |
| Population squared | −0.0003*** (0.0001) | −0.0004*** (0.0001) | −0.0003* (0.0002) | −0.0004** (0.0002) |
| Poverty rate | −0.4846* (0.2126) | −0.5845*** (0.2006) | 2.7192*** (0.6920) | 2.5028*** (0.5135) |
| Violent crimes | −0.0986 (0.0629) | −0.0146 (0.0496) | −0.1774 (0.1530) | 0.0315 (0.0855) |
| Total HS enrollment | −0.0001 (0.0001) | −0.0003*** (0.0001) | −0.0001 (0.0001) | −0.0004* (0.0002) |
| Median HH income | 0.0003*** (0.0001) | 0.0003*** (0.0001) | 0.0010*** (0.0003) | 0.0011*** (0.0003) |
| Year fixed effects | No | No | Yes | Yes |
| City fixed effects | No | No | Yes | Yes |
| <i>N</i> | 5379 | 5379 | 5379 | 5379 |
| <i>R</i> ² | 0.9359 | 0.9409 | — | — |
| Rho | — | — | 0.5052 | 0.5221 |

Note: Significance codes: **P* < 0.10, ***P* < 0.05, ****P* < 0.01. Robust standard errors are in parentheses.

Table 4
Interpreting the Effect of Three Sources of Nonprofit Revenue on Sector Density (millions of dollars)

| Revenue Source | Mean | SD | Effect (β -SD) | 1/ β |
|-------------------|--------|---------|-----------------------|------------|
| Private support | \$18.7 | \$74.6 | 3.1 | \$24.5 |
| Government grants | \$22.8 | \$74.1 | 15.6 | \$4.7 |
| NP revenues | \$59.8 | \$165.7 | 45.5 | \$3.6 |

needed in private support to increase nonprofit density by one organization. A much smaller increase in government grants will have the same effect—only \$4.7 million additional dollars are needed to add a nonprofit organization to the community. Nonprofit program revenues prove to be the most “efficient” use of resources for this purpose, though, with only \$3.6 million additional dollars needed in a county to support an additional nonprofit organization.

As noted above, it is not possible to parse government contracts from the program revenues variable. We know for certain that a large proportion of nonprofit program revenue indeed comes from government sources—roughly \$100 billion (Urban Institute 2010).¹⁴ As a result, the interpretation of program revenues must take into account the reliance on government funding for many program activities. In this regard, the government grants variable and the program revenues variable are both measures of government influence on the nonprofit sector via different policy mechanisms (grants versus contracts).

These findings point to a result that nonprofit density in a community is more sensitive to changes in government grants and program revenues than they are to private support such as foundation grants and individual donations. Since government failure theory operates primarily through the private support variable, interdependence theory would appear to be a more powerful explanation and larger driver of nonprofit density. These results are not to suggest that government failure theory and interdependence theory are fundamentally incompatible, but government failure loses explanatory power as a theory describing patterns in nonprofit density once government activities are accounted for. It appears to be the case that government grants and contracts lead to a much larger nonprofit sector, per dollar spent, than private resources. This finding conflicts with the results from the other large-scale panel study of government failure theory by Matsunaga and Yamauchi (2004). Recall that they were using the core dataset from NCCS, which does not separate private donations from government grants. As a result, they interpreted a positive coefficient on the grants variable as support for government failure theory, attributing the results to private donations. Using the NCCS digitized dataset, we are able to differentiate between these two funding streams, and in doing so, the effects of private donations disappear. This suggests that their results may have been spurious, and the evidence for government failure theory needs to be reexamined.

The reasons for strong interdependence could be myriad, but the theory that we propose relates to the need for stable funding. Foundations can be fickle patrons as they may prefer to support new organizations, new programs, and themes that evolve over time and within a community. In addition, depending on the type of foundation, the resources

¹⁴ In updating data on federal spending from Salamon (2002, 4), we find that approximately \$537 billion is spent on federal government contracts annually or 20.2% of all “indirect” federal program investments. See www.USAspending.gov for details.

allocated by these philanthropic organizations are influenced by board member interests and their own personal motivations to fund certain organizations that reflect their values and perceptions of need. As a result, foundations are unlikely to support, at a substantive level, a single organization over a long period of time. Government contracts, on the other hand, are subject to high transaction costs associated with the due diligence needed to hire contracting partners and establish collaborative partnerships. Once investments have been made in these bilateral relationships, in many instances, government agencies would prefer to deal with the same partners over time assuming adequate performance and financial controls. This can result in stable sources of funding for nonprofits, growth, and expansion into related services. The stability leads to sustainable nonprofit ecosystems and supports sector density (Gronbjerg 1993).

The government and the nonprofit sector evolve in an interdependent way. Governments benefit from stable relationships with nonprofits because risk is managed, goods are produced, services delivered, and the costs of rebidding contracts or awarding grants to new and potentially unknown recipients are lowered. Given government's historical risk-averse culture and posture and their goal of improving performance through efficiency, economy, and flexibility without sacrificing quality, there continue to be pressures to lower the costs associated with managing third-party relationships. Therefore, contracts and grants are two potential policy tools that governments can use to ensure stability in the provision of public services to communities and clients. These particular policy tools also afford government the ability to manage risk and uncertainty through contractually based governance and accountability mechanisms, such as monitoring, reputation, and award fees and terms. Nonprofit organizations can also potentially benefit in significant ways from establishing stable relationships with government agencies because there is a greater degree of confidence in the continuity of funding and expectations about quality control through performance audit functions. However, as some scholars have pointed out (i.e., Gazley 2010; Gazley and Brudney 2007; Gronbjerg 1993; Guo and Acar 2005), nonprofit organizations need to remain vigilant that interdependence does not lead to mission drift or cooptation, scope creep, or their potential advocacy being limited in the policy process. Therefore, the government–nonprofit is not without tensions.

The findings from our analysis also affirm other results from previous studies. Poverty rates are positively associated with nonprofit density. This suggests that nonprofits are in fact locating in areas with higher need (Gronbjerg and Paarlberg 2001). A 2.5% increase in the poverty rate is associated with one additional nonprofit entry into the community. Community wealth is also associated with nonprofit density (Gronbjerg and Paarlberg 2001). An increase in the median household income by \$900 is associated with one additional nonprofit operating in the county.¹⁵ Violent crime did not prove to be a significant indicator, but this variable appears somewhat unreliable when examined in detail. It is not clear if crime statistics are reported at the county level or the city level, so the census data may have some aggregation errors. More analysis is recommended for this particular relationship.

Government wages is considered to be the most reliable measure of government size because it accounts for federal wages, county wages, and local government wages. It is consistent with theory that nonprofit density will decrease with increases in government

15 Nonprofit density increases as poverty increases but also increases as income increases. These results appear to be somewhat contradictory, but they likely indicate that density is tied to inequality. Poverty rates and average wealth can increase at the same time when inequality is on the rise.

size. Income subsidies and federal grants (at large and administered through counties, not directly to nonprofits) did not prove to be significant predictors of nonprofit density, which is unsurprising since there is not a clear theory about why it should. These variables were primarily included as controls.

One limitation of this study results from measuring nonprofit density as the number of nonprofits in a community versus the *size* of nonprofits in the communities. In this study, nonprofit size could not be used as a dependent variable because it is collinear with the primary independent variables—nonprofit revenue streams. We can see in table 5, however, that government grants or contracts (revenues) are more likely to go to large organizations and that private donors favor small organizations. This suggests that the results would not likely change if nonprofit size was used as a dependent variable instead of number.

The table shows cursory evidence that even though government funds are more efficient at the creation of new organizations, this does not mean that they target small organizations at the expense of large ones. Recent research also suggests that nonprofits are accelerating revenue generation through the development of social enterprises and other entrepreneurial activities (Kerlin 2010; Young 2008). It is not clear whether nonprofit density has increased as a result of this increase in entrepreneurial activity or whether social enterprise is used primarily by large, well-established organizations. More research is needed to fully disentangle the relationship between the number of nonprofits in a community and the distribution of resources across different-sized organizations.

An important question for subsequent researchers is investigating whether private grants and donations lead to greater levels of nonprofit growth relative to government grants and contracts. Alternatively, do private foundations tend to favor more consolidation than government grant makers? Also, does greater nonprofit density or larger nonprofits lead to increased vulnerability within the nonprofit sector? Government could potentially induce more nonprofits to enter a community as a result of government funding rather than community need. In theory, high nonprofit density could have adverse effects on communities if nonprofits engage in an inefficient level of fundraising activity seeking to attract donations from a shrinking donor base (Andreoni 2007). If nonprofits have to compete against one another for labor, philanthropic resources, and even clients, expending more of their own limited financial and human capital capacity, then government subsidies to

Table 5
Resource Allocation of Each Revenue Stream by Nonprofit Size in 2003

| Group Percentile | Average Nonprofit Size | Proportion Allocated to Each Group | | | |
|------------------|------------------------|------------------------------------|----------------------------------|--------------------------------|---------------------------------|
| | | ALL Revenues (\$117 Billion) | Government Grants (\$27 Billion) | Private Support (\$17 Billion) | Program Revenues (\$60 Billion) |
| 0–20 | \$33,980 | 0.4% | 0.1% | 0.5% | 0.2% |
| 21–40 | \$97,379 | 1.1% | 0.4% | 1.9% | 0.7% |
| 41–60 | \$243,452 | 2.9% | 2.0% | 5.1% | 2.2% |
| 61–80 | \$697,426 | 8.2% | 7.9% | 11.8% | 6.8% |
| 81–100 | \$7,455,251 | 87.4% | 89.6% | 80.5% | 90.2% |
| | | 100% | 100% | 100% | 100% |

Note: On average small nonprofits receive much more from private support than from government grants; \$85 million versus \$27 million

nonprofits may have the unintended effect of lowering the health of the sector and communities. Transaction costs associated with governing a network of nonprofits may also rise with density (Provan and Milward 1995). Although government funding appears to be the most efficient mechanism for growing the number of nonprofit organizations in a community, it cannot be assumed that density directly correlates with community need. It is generally assumed that more density is better since communities always have needs that are unmet, but there is no model of how much density is efficient from a community standpoint. There is pressure from government and private philanthropic organizations, such as the United Way, for nonprofits to consolidate. Substantial research and practice suggests that these funders favor large, lean, and networked nonprofits. Smaller nonprofits may not be able to access government funding streams, and even if they are successful, they risk becoming co-opted or dependent. This has the potential to create barriers for smaller organizations in attracting private donations and other forms of support.

CONCLUSION

This article examines two of the most important theories that have been used to date in explaining the nature of the government–nonprofit relationship. Government failure theory and interdependence theory are tested to determine which best explains the issue of nonprofit density among human service organizations. Our analysis is framed and tested using panel data for 331 MSAs in the United States. In focusing on the relationship between funding patterns and nonprofit density, we examine different sources of nonprofit revenue. Each of the revenue sources has a positive relationship to nonprofit density,¹⁶ but it is government funding in the form of grants and contracts that appears to have the most efficient effect on increasing the number and therefore growth rate of nonprofits that serve in a community. Although we do not directly test theories of philanthropy, social capital, and religious theories of giving, we do use the two theories that have the most empirical support and scholarly activity with regards to public policy, public management, and questions of governance.

Lester Salamon (2002), in his well-regarded book *The Tools of Government* reported that 95 cents of every federal dollar was spent on third-party providers in 1999. The implication is that the government overwhelmingly relies on policy tools to fund the production and delivery of goods and services through a range of third-party intermediaries, and as a result, the nonprofit sector has become interdependent with the government. Our results show that government funding has important implications for the density of the nonprofit sector within communities.

These findings have important policy and management implications for government and nonprofits. Perhaps, the most pressing question for government is that of the health, vitality, and density of the nonprofit sector. We find that an increase of approximately \$4.7 million in governmental support through grants and contracts has the effect of increasing the number of nonprofits serving a community by one additional organization. Compare this to the \$24.5 million that is needed to induce the creation of a nonprofit in a community as a result of private support through foundation grants and individual philanthropy; five times as high. As a result, we find empirical support for interdependence theory and the set of common assumptions associated with this theory that government and nonprofits have

16 Only government grants and nonprofit revenues are statistically significant, though, private grants are not.

settled into a relationship whereby public funding stabilizes the production of goods and provision of services by nonprofit third parties. We also find that an increase in nonprofit revenues by \$3.6 million results in an additional nonprofit entering into a community. Although there is no way to separate government contracts out from other forms of earned revenues, they constitute a large portion of this revenue stream, so this estimate also provides tacit support for interdependence theory.

The normal caveats about too much reliance on government funds apply (Smith and Lipsky 1993). If we consider that private sources of support may limit funding stability because of changes in donor and institutional preferences for allocating their philanthropic support, governmental funding also has limitations. Joint negotiations between nonprofits and government may reveal that although nonprofits rely on public funding to subsidize their programmatic activities, such reliance, especially in fiscally constrained periods, may actually exacerbate operational and capacity gaps and therefore the organizational health of nonprofits and the vitality of communities that depend on nonprofits for services. Similarly, nonprofits may be at a tipping point in which they recognize that their own growing reliance on public funding, especially true among human service nonprofits, may not only be compromising their organizational voice in the policy process and cause them to engage in activities that reflect mission creep but also increase their fiscal vulnerability because of funding and policy changes in their areas of programmatic involvement. It is notable, however, that despite all the drawbacks of interdependence, government funding still has a more salubrious effect on nonprofit density and growth than do private donations.

The issue of government funding on nonprofit density and growth also has implications for more traditional assumptions about the effects of crowding out and crowding in of private donations by government funding. A dollar of private support is not the same as a dollar of government support in the eyes of a nonprofit. Government funding can help to stabilize a nonprofit's revenue base and create a level of standardization and continuity regarding program expectations and performance measures. And government funding can, as we noted earlier, provide important signals to internal and external stakeholder constituencies about nonprofit organizational health and sustainability. Stability of policy priorities and funding for programs and certain client groups as well as government's desire to reduce risks by continuing to work with reliable nonprofit partners suggests a greater degree of commitment by government to nonprofits and to stimulating their development in MSAs.

A limitation of the study is the inability to separate government contracts out from the nonprofit revenue variable. This limitation results directly from the structure of the IRS 990 question and proves to be an impediment to policy research since government contracts have become so central to nonprofit operations. A second limitation is that although the NCCS database does not capture the full universe of nonprofits (Gronbjerg et al. 2010), it is the most representative and complete single source. Among the limited databases, it is also the one that is highly likely to include most human service organizations at a generalizable level of inference given the public reporting requirements for organizations that receive federal funding. Another limitation of the study results from examining only the human services portion of the nonprofit economy. Since other subsectors like arts and culture, environment, education, health care, and international development all rely on government funds in slightly different ways, it is not clear whether the relationships would be identical in these sectors (Gronbjerg and Paarlberg 2001). The size of the coefficients would

most certainly vary, but the interesting question is whether the direction and statistical significance would prove constant in other sectors.

Our findings may generate a host of questions about alternative policy tools for the nonprofit sector, such as loan guarantees and tax expenditures that may stimulate certain kinds of nonprofit investments without having the same direct subsidy effect. The question of what is the optimal level of nonprofits in a community relative to need is also an important and underexamined question. However, our findings begin to pave the way and provide a critical piece of the puzzle. If additional social services are needed within a community, governments can more aggressively use subsidies directed to nonprofit organizations to stimulate their entry and build capacity. Conversely, if government wants to support a fairer and more level playing field for the production of goods and provision of services in local markets, then it may think about cutting those same nonprofit subsidies and creating an opportunity for private, for-profit enterprises to compete.

Understanding appropriate policies to support a healthy and vibrant nonprofit sector is an important issue for nonprofit managers and policy makers. Assessing the best way to use public funds to balance community, government, and nonprofit needs is a complex task that requires significant discussion among policy makers, nonprofit leaders, and communities. This study provides a new piece of data to this question, evidence that contradicts earlier work by Matsunaga and Yamauchi (2004) but which should contribute to the debate about the role of government funding in developing a healthy civil society in which nonprofit density is an important component. Although the findings presented here suggest that government has one set of levers that can be used to enhance the size of the nonprofit sector, we also hope that this research might shift the discussion from the crowding-out questions which focus on questions of fundraising efficiency to debates that examine nonprofit sectors holistically and examine efficiency from a community level instead of only an organizational one.

Moving forward, there are relevant and timely research questions that advance our understanding of the complex relationship between government and nonprofit organizations. Many scholars already cited in this article (Gronbjerg 1993; Saidel 1991; Smith and Lipsky 1993) have written about the challenges and risks associated with nonprofit dependency on government, but few have focused on the importance of these relationships. Many of the theories of nonprofit sector size are descriptive, reactive, and focus on failures and deficiencies. Less time has been spent in understanding drivers of opportunity for nonprofit organizations. Scholars need to empirically address a set of questions about how nonprofits develop adaptive and responsive strategies to turbulence, opportunity, stability, and growth. For example, although there is some developing literature and research about social entrepreneurship, less is known about nonprofit entrepreneurship. Understanding the drivers that facilitate or inhibit density can lead to more effective third-sector policy instruments, if in fact the drivers of nonprofit sector growth are responsive to policy tools.

Fundamentally, this research raises questions about how much density is good in the nonprofit sector. For example, in a competitive marketplace, monopoly is bad for obvious reasons. But some argue that too much density in the nonprofit sector can carve up the resource pie into pieces too small to recover fixed costs and leads to increased transaction costs, creating hypercompetitive markets that deter new entry. The research here lends itself to the metaphor of an ecosystem, not a market. The pie becomes larger through diverse nonprofit resource bases and a shift toward government practices that rely on policy

tools requiring strong collaboration with the nonprofit sector. Do the trade-offs between small government and large nonprofits better address community needs and preferences? Is there evidence that the ecosystem works? These kinds of research questions will lead to a more nuanced understanding of the government–nonprofit relationship, contribute to further theoretical developments with potentially broader generalizability beyond the US context, and offer relevant policy and management implications for those working in and with the nonprofit sector.

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