Social Capital and the Growth of the Nonprofit Sector*

Gregory D. Saxton, *State University of New York, College at Brockport* Michelle A. Benson, *University at Buffalo, State University of New York*

Objectives. This article examines the extent to which nonprofit organizational foundings are determined by various forms of social capital. Our hypothesis is that, controlling for other relevant social, political, and economic factors, communities with higher levels of social capital should experience more extensive growth in their nonprofit sectors. Methods. Using data derived from the Social Capital Community Benchmark Survey and the IRS "charitable organization" Business Master Files, we test our hypothesis using a negative binomial event count regression on nonprofit organization foundings in 284 U.S. counties in the year 2001. Results. We find that two core dimensions of social capital-political engagement and "bridging" social ties-have a significant impact on county-level nonprofit foundings. Surprisingly, a key element of social capital in the literature, the level of interpersonal trust, does not lead to an increase in foundings of new not-for-profit organizations. Conclusions. This study provides further evidence of the strength of political engagement and bridging ties for the vitality of the community. It also shows that the different dimensions of social capital do not manifest a uniform effect on nonprofit sector growth. These results further demonstrate that the growth of a community's not-for-profit sector is dependent on a mix of ecological and environmental factors, especially preexisting organizational density, median household income, unemployment, and levels of governmental spending. Overall, social capital can usefully be seen as another key "environmental" factor in explanations of organizational foundings.

With the publication of *Making Democracy Work* (1993a), "The Prosperous Community" (1993b), and *Bowling Alone* (1995, 2000), Robert Putnam sparked a decade-long debate on the value of civic engagement to society writ large. His primary argument is that communities with high levels of *social capital*—by which he means the networks of civic engagement that engender societal norms of reciprocity and trust—are happier as well as more cohesive, vibrant, and prosperous. Putnam effectively argues that social capital is not a "fuzzy," "feel-good" concept, but a measurable aspect of life

*Direct correspondence to Gregory D. Saxton, Department of Public Administration, SUNY—College at Brockport, 350 New Campus Dr., Brockport, NY 14420 (gsaxton@brockport.edu). We thank the editor and the two anonymous reviewers for their helpful comments. The data used in this article are available at the first author's replication website (http://www.itss.brockport.edu/~gsaxton/papers.html).

SOCIAL SCIENCE QUARTERLY, Volume 86, Number 1, March 2005 ©2005 by the Southwestern Social Science Association with clear political, economic, and social implications. Specifically, he posits that networks of civic engagement not only foster sturdy norms of generalized reciprocity, but that they facilitate coordination and communication while amplifying information about the trustworthiness of other individuals. The end result is that social capital acts as an efficient "lubricant" that facilitates all forms of societal interactions—in the same way that using money in market transactions is more efficient than old-fashioned barter transactions.

The past decade has thus seen a flourishing literature on the impacts of social capital on a plethora of social, economic, and political phenomena. Research has shown positive associations between the extent of a community's social capital and the performance of its schools (Putnam, 2000:300), its governments (Putnam, 1993a; Schafft and Brown, 2000; Pierce, Lovrich, Jr., and Moon, 2002), and its economic development (Romo and Schwartz, 1995; Woolcock, 1998). For individuals, social capital has been linked to improved health, earnings, and happiness (Putnam, 2000:319, 326), while at the organizational level, researchers have found strong associations between social capital and "corporate entrepreneurship" (Chung and Gibbons, 1997), firm mortality (Pennings, Lee, and Witteloostuijn, 1998), the creation of human and intellectual capital (Coleman, 1988), the formation of start-up companies (Walker, Kogut, and Shan, 1997), the strength of supplier relations (Baker, 1990; Uzzi, 1997), interfirm learning (Kraatz, 1998), the expansion of regional production networks (Romo and Schwartz, 1995), and the formation of strategic alliances (Chung, Singh, and Lee, 2000).

In short, social capital has been linked to numerous intra- and extraorganizational factors that facilitate the formation, expansion, contraction, and management of public, private, and nonprofit organizations alike. In this article we extend previous research by examining in depth the relationship between various forms of social capital and one of the core "transactions" of civil society—the ability of individuals to work together in initiating group responses to community problems. Specifically, we posit here that the increased trust, coordination, and communication engendered by elevated community levels of social capital render it easier for individuals to come together to form new nonprofit organizations. Our hypothesis is that, controlling for other relevant social, political, and economic factors, communities with higher levels of social capital should experience faster rates of growth in their nonprofit sectors.

Using data from the Social Capital Community Benchmark Survey, the Internal Revenue Service's "charitable organization" Business Master Files, the U.S. Census Bureau, and other federal government data sources, we are able to test the impact of six different dimensions of social capital on nonprofit organizational foundings in 284 American counties in the year 2001. Using a negative binomial event count model, we find that two facets of social capital—political engagement and "bridging" ties—have a significant impact on the number of county-level nonprofit foundings above and beyond the effects of community demographic characteristics, local economic performance, government spending, and preexisting organizational density. The study thus carries important implications for the literatures on social capital, organizational ecology, civic engagement, and nonprofit organizations. Of particular interest is the finding that a key component of social capital in the social science literature, the level of interpersonal trust, is not associated with increased levels of organizational foundings.

Theoretical Background—The Community Impacts of Social Capital

America's not-for-profit sector has steadily increased in social, political, and economic importance over the past century. In the past 25 years alone, paid employment in the nonprofit sector as a percentage of total U.S. employment rose from 5.3 percent to 7.1 percent, while the number of organizations jumped from 740,000 to 1.2 million (Independent Sector, 2001). The growth is not entirely even, however. As with regional and local disparities in the business sector, the nonprofit sector of some communities is unquestionably healthier than that of others. Could disparate levels of social capital supply part of the reason? In short, do communities with higher levels of social capital experience greater rates of growth in their nonprofit sectors?

To understand our argument, one must first appreciate the array of community-level impacts that social capital is posited to have. As with any concept that has assumed such broad popularity, the range of specific definitions used by interested scholars is itself quite broad (for an extensive comparison of the numerous approaches taken, see Adler and Kwon, 2002). The preferred definitions of four of the most influential social capital scholars highlight this diversity.

- "Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure" (Coleman, 1990:302).
- Social capital is "the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes, 1998:6).
- "Social capital can be defined . . . as an instantiated set of informal values or norms shared among members of a group that permits them to cooperate with one another" (Fukuyama, 1999:16).
- "Social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000:19).

For Coleman, "social capital" refers to the social networks themselves; for Portes, to the benefits that accrue from membership in those networks; for Fukuyama, to the networks' norms; and for Putnam, to both the norms and the networks. Although there are semantic differences over whether trust is a key component of social capital or merely a manifestation of it, most scholars are interested in both sides of the equation—they consider not only a community's web of societal networks but also the norms, expectations, and benefits that derive from it. Put in broader terms, most relevant research is thus interested at its core in social capital as a measure of the value of a community's social networks.

A useful way of understanding this value is to refer to the analogies of physical capital (e.g., buildings, roads) and human capital (intellectual resources). Generically, these forms of capital refer to tools and training that enhance productivity. In a similar fashion, the networks, norms, and trust engendered by *social capital* enhance productivity by facilitating "coordination and cooperation for mutual benefit" (Putnam, 1995:67). Extensive networks of civic engagement facilitate coordination and communication and amplify information about the trustworthiness of others. When economic and political dealing is embedded in dense networks of social interaction, incentives for opportunism and malfeasance are reduced. At the same time, networks of civic engagement foster sturdy norms of generalized reciprocity. Overall, social capital serves to "lubricate" social life (Putnam, 1993b). By leading to greater reciprocity, cooperation, and institutional effectiveness, it facilitates all forms of social interactions.

It is thus that social capital has been shown to be strongly associated with improvements in numerous aspects of individual, organizational, and community success. It is the community-level impacts that interest us here. Overall, social capital constitutes a considerable resource for a community's social, political, and economic development. In general, it has been shown to help communities overcome "tragedies of the commons" and collective action problems in a wide range of areas—including water shortages, crime, drugs, and hazardous waste (Putnam, 2000:288, 307, 310, 344). As noted above, research has also documented significant relationships between a community's level of social capital and the performance of its schools (Putnam, 2000:300), its governments (Putnam, 1993a; Schafft and Brown, 2000; Pierce, Lovrich, Jr., and Moon, 2002), and its economy (Putnam, 1993b; Romo and Schwartz, 1995; Woolcock, 1998).

This article posits that social capital will also have a positive impact on the vitality of a community's voluntary sector and, in particular, on the foundings of new nonprofit organizations. We argue that because of the "lubricating" functions of social capital, it should in the first case be easier for individuals in communities with higher levels of social capital to "coordinate and cooperate" to pursue a common interest through the founding of any form of organization—be it public, private, or nonprofit. We further deduce that this should especially be the case for organizations in the voluntary sector: given the additional focus of social capital on "civic engagement," we should expect that individuals in high-social-capital communities are most likely to come together to found charitable nonprofit organizations designed to counteract community-based problems.

Alternative Explanations of Organizational Foundings

Prior studies on organizational foundings in the nonprofit sector have examined social service organizations (Tucker, Singh, and Meinhard, 1990), medical societies (Marrett, 1980), women's and racial groups (Minkoff, 1995), and unions (Hannan and Freeman, 1987). All have used and contributed to the core organizational ecology theories without specific consideration of the fact that they are not-for-profit organizations. There are two main approaches to explaining organizational foundings in the relevant literature: an "ecological" approach and an institutional, or "environmental," approach (Singh and Lumsden, 1990). Both will be incorporated as controls in our test.

The Ecological Approach—Organizational Density and Prior Organizational Foundings

This approach focuses on factors related to ecological or population dynamics. The first area of interest in the ecological approach is the impact of "density dependence," or preexisting organizational density, on current organizational foundings (Hannan and Freeman, 1987; Carroll and Hannan, 1989; Minkoff, 1995; Sorenson and Audia, 2000). Density appears to generate two competing processes: "legitimation," which spurs organizational foundings; and "competition," which tends to inhibit the creation of new organizations (Hannan and Freeman, 1987).

Legitimation processes can lead to positive density dependence when "legitimacy increases with the prevalence of the form in society" (Hannan and Freeman, 1987:918; see also Abzug and Turnheim, 1998). High existing density has also been posited to increase the founding rate via the expansion of relevant social and skills networks (Marrett, 1980) and various "agglomeration externalities" that come with the concentration of specialized employees, information diffusion, reduced wages, and geographically concentrated "entrepreneurial incubators" (Sorenson and Audia, 2000; Sørensen and Sorenson, 2003). However, beyond a certain point, some have found that increasing density engenders competition for resources that leads to a decrease in the founding rates of new organizations (Hannan and Freeman, 1987; Minkoff, 1995).

The ecological approach also takes a strong interest in the impact of prior organizational foundings on the creation of new organizations (Tucker, Singh, and Meinhard, 1990; Haveman, 1993). A similar set of arguments are posited as with organizational density—that, as a result of limits in a population's "carrying capacity," prior organizational foundings will tend to have an overall negative impact on current foundings (Hannan and Freeman, 1987).

There is some evidence, however, that the relationship could be positive in the nonprofit sector. Tucker, Singh, and Meinhard (1990) found that prior organizational foundings had a weak positive impact on the founding rate. An important feature of this study, moreover, is that it does not focus exclusively on one industry or business sector where all organizations are in direct competition with one another. It is therefore possible that increasing density and higher prior foundings might lead to increased legitimation without the competition. In addition, one of Putnam's central arguments (1993b) is that social capital is not spent, but rather increases, when it is used.¹ We might therefore expect that the more individuals become involved in civil society through the creation of new organizations, the greater the carrying capacity in the nonprofit sector. This would suggest a monotonic, positive impact of both density and prior foundings on organizational foundings in the nonprofit sector as a whole.

The Environmental Approach—The Social, Economic, and Institutional Context

The environmental approach searches for factors in the institutional, social, and economic environment to explain changes in organizational founding patterns. Pennings (1982) was one of the first to explore the impact of economic and sociodemographic contextual factors on community-level differences in industrial organizational foundings. In the nonprofit literature, it is often posited that certain environmental variables—such as the size of the community and the lack of financial resources—inherently increase the *demand* for nonprofit services (Corbin, 1999; Grønbjerg and Paarlberg, 2001; Twombly, 2003), while others—including population growth (Bielefeld, 2000), community wealth (Wolch and Geiger, 1983; Wolpert, 1993; Corbin, 1999), and the proportion of older residents (Grønbjerg and Paarlberg, 2001)—serve to increase the *supply* of human and financial resources that can in turn be mobilized (Hannan and Freeman, 1987) by the public to found new organizations. Still others have found an important role for changes in the *institutional* environment in explaining non-profit founding patterns (Hannan and Freeman, 1987; Twombly, 2003).

In addition, there has been especially contentious debate over the relationship between government spending and the size and scope of the nonprofit sector. On one side of the debate is the argument that an expanding bureaucratic state almost inexorably "crowds out" community-based organizations (e.g., Nisbet, 1962). Such theories point to a zero-sum, conflictual government-nonprofit relationship and the essential "substitutability" of the government and nonprofit sectors. In this view, nonprofit organizations can take on a "supplementary" role (Young, 2000) and will often fulfill the demand for public goods left unsatisfied by the government (for empirical evidence, see Ben-Ner and Van Hoomissen, 1990; Liebschutz, 1992).

On the other hand, the findings of large-scale cross-national research by Salamon and Anheier (1997, 1998) cast doubt on the "market failure/ government failure" explanations of the nonprofit sector and their subsidiary

¹Putnam (2003b) argues that stocks of social capital—the trust, norms, and networks—generally derive from ongoing, repeated interactions and tend to be cumulative and self-reinforcing.

notion of sectoral "substitutability." Instead, their research points to a "partnership" (Salamon, 1996) between the two sectors, where the relationship is essentially cooperative and complementary.

While there are clearly circumstances where the civil society sector is at odds with the state, there are at least as many where the relationship is one of interdependence and mutual support The state has thus emerged in the modern era not as a displacer of nonprofit activity, but as perhaps the major "philanthropist" (Salamon and Anheier, 1997:63–64)

Recent findings by Marcuello (1998) and Bielefeld (2000) of a positive relationship between government spending and the size of the nonprofit sector support this view, as does current evidence from O'Neill (2002) indicating that social service nonprofit organizations in the United States now receive two-thirds of their revenue from government sources.

Research Design and Data

In this article we seek to explain differences in county-level nonprofit foundings through variation in levels of social capital. Just as enhancements in productivity or changes in fiscal or monetary policy are often touted for their impact on the growth of the economy as a whole, Putnam (2000:323) has argued that "at the local or regional level, there is mounting evidence that social capital among economic actors can produce aggregate economic growth." We believe that the same applies to the nonprofit sector—that higher levels of social capital can engender overall nonprofit sector growth. Accordingly, we examine here the effects of community-level social capital on the foundings of new nonprofit organizations across the entire sector.

Dependent Variable: Organizational Foundings

To operationalize our dependent variable, we utilize the Urban Institute's National Center for Charitable Statistics (NCCS) databases² on 501(c)(3) organizations. Approximately two-thirds of the 1.2 million total nonprofit organizations and religious congregations in the United States have this 501(c)(3), or "charitable organization," designation.³ Current descriptive

²The NCCS is the leading repository of American nonprofit sector data. It is heavily involved in building uniform reporting standards and compatible nonprofit databases (Urban Institute, 2003).

³Nonprofit organizations in the United States are defined and regulated primarily under the federal tax code. The three predominant types of tax-exempt organizations under the code—comprising over three-quarters of all organizations in 1998—are 501(c)(3), or "charitable" organizations (N = 734,000); 501(c)(4), or "social welfare" organizations (N = 140,000); and religious congregations (N = 354,000). In short, 501(c)(3) organizations, such as the United Way, constitute the majority of what people would commonly refer

data on all active 501(c)(3) organizations are contained in the Internal Revenue Service's Business Master File (BMF). Every six months since 1995, the NCCS has downloaded and cleaned this IRS database. These NCCS data constitute an excellent resource in that they allow us to conduct a nonsampled investigation of all new registered charitable organizations.

As with all research, the number of cases is governed by the temporal and observational constraints of the most limited variable. Because our social capital data are available in the year 2000 for 284 U.S. counties, our dependent variable, *Organizational Foundings*, is calculated as the number of new nonprofit organizations in each of these 284 counties. In addition, to ensure that we are measuring the exogenous effect of social capital on foundings, we use 2001 year (rather than 2000 year) data for the dependent variable. In particular, to operationalize *Organizational Foundings*, we created a data set that includes every nonprofit organization in the NCCS files with a 2001 year value on the *Ruledate* variable, which denotes the date of the IRS ruling on the organization's tax-exempt status.⁴ A total of 11,929 organizational foundings were recorded for all 284 counties in the year 2001.⁵

Independent Variable: Community-Level Social Capital

With Robert Putnam as the Principal Investigator, the Social Capital Community Benchmark Survey (SCCBS) was designed by the Saguaro Seminar Project at the John F. Kennedy School of Government at Harvard University. The Survey, with 26,200 respondents, contained representative samples of 40 communities spread across 284 counties in 29 states in the year 2000.⁶

Quantitative analyses normally measure social capital in terms of several core elements or dimensions (Putnam, 2000:291; Adler and Kwon, 2002). In *Bowling Alone*, Putnam (2000:291) concentrates on five key dimensions of social capital: (1) engagement in public affairs, (2) community volunteerism, (3) community organizational life, (4) informal sociability, and (5) social trust. The SCCBS is notable inasmuch as it allows us to operationalize these five dimensions along with a key sixth dimension Putnam has increasingly emphasized—the extent of "bridging" social ties.⁷ We thus measure the following six dimensions of social capital.

to as "nonprofit organizations." They serve broad public purposes and are organized for educational, religious, scientific, literary, relief of poverty, and other activities for the public benefit. Donations to 501(c)(3)s are tax-deductible. In contrast, contributions to 501(c)(4) organizations, which are not "charities" and are often heavily engaged in advocacy work (e.g., the Sierra Club), are not tax deductible.

⁴To ensure that our dependent variable is complete we examine the 2001, 2002, 2003, and 2004 BMF databases.

⁵See the replication website (see note *) for an appendix containing summary statistics on all model variables.

⁶The replication website (see note *) contains a detailed list of the communities surveyed. ⁷For an assessment of the use and usefulness of different conceptions of social capital variables, see Portes (1998). Strong overviews of pertinent issues in the measurement of social

- "Bridging" Social Ties. First, we include a measure of the *Diversity of Friendships*. This index taps the "bridging" facet of social capital that Putnam has increasingly concentrated on in his more recent writings on civic engagement. The variable measures the diversity of social networks by asking whether "the respondent had a personal friend who is a: business owner, was on welfare, owned a vacation home, is gay, is a manual worker, is White, is Black, is Hispanic, is Asian, is a community leader, and was of a different faith" (Saguaro Seminar, 2001:8–9). This summative index "broadly measures the degree to which people's social networks (and, collectively, a community's networks) are diverse" (Saguaro Seminar, 2001:9).
- **Political Engagement.** Second, we use the *Political Engagement* (conventional politics participation) index, which measures the proportion of residents in each community that "are registered to vote, express interest in politics, are knowledgeable about political affairs, and read the newspaper regularly" (Saguaro Seminar, 2001:9).
- **Giving and Volunteering.** Third, the *Giving and Volunteering* index measures "how often community residents volunteer at various venues and how generous they are in giving" (Saguaro Seminar, 2001:10).
- Civic Engagement. Fourth, civic engagement is measured with an *Associational Involvement* index, which captures individuals' involvement across 18 broad categories of groups and associations.
- Informal Socializing. Fifth, the *Informal Social Networks* index taps social connectedness that occurs outside of formal associations. It measures "the degree to which residents had friends over to their home, hung out with friends in a public place, socialized with co-workers outside of work, played cards or board games with others, and visited with relatives" (Saguaro Seminar, 2001:9–10).
- **Social Trust.** Lastly, for the social trust dimension, we use the *Social Trust* index, which taps generalized trust by combining scores related to trust of neighbors, co-workers, clerks, co-religionists, cops, and "most people."

Control Variables: Ecological and Environmental Factors

We include two variables derived from the previously described BMF files to control for the effects of ecological factors on community organizational foundings. *Organizational Density* measures the number of organizations in existence in each county in December 2000, and *Prior Organizational Foundings* counts the number of new nonprofit organizations founded in each county in the 2000 calendar year. The incorporation of these two variables should give us a solid account of the extent to which social capital

capital are provided by Fukuyama (1999), Van Schaik (2002), and Grootaert and van Bastelaer (2001). For more detailed discussions of the meanings of the various dimensions, see Putnam (2000) or Saguaro Seminar (2001).

has an impact on nonprofit foundings above and beyond the impact of each county's established organizational ecology.

We then include a series of eight variables to control for the effects of the social, political, institutional, and economic environment. First, three measures were developed from U.S. Census Bureau data (U.S. Bureau of the Census, 2001) to account for a community's population in 2001: *Population* (total county population, in 1,000s), *Population Change* (change in county *Population* from 2000 to 2001), and *Population Density* (*Population* per square mile). As Pennings (1982) argues, we expect that counties with a larger population will have both larger and faster-growing nonprofit sectors. Based on the argument by Hannan and Freeman (1987; see also Bielefeld, 2000), we also posit that high population growth constitutes a considerable resource that nonprofit leaders can exploit in the founding of new organizations. Lastly, because urban environments should find it easier to develop a concentrated nonprofit community and, moreover, often have the greatest needs, we expect a positive relationship between population density and the growth of the nonprofit sector.⁸

Next, we include a variable, Median Household Income (\$1,000s),9 designed to measure the wealth of the community (U.S. Bureau of the Census, 2002a). In general models of organizational change, such as Hannan and Freeman's (1987) resource mobilization model or Penning's (1982) contextual approach, the availability of human and financial resources and level of community development tapped by household income is positively related to the growth of a county's nonprofit sector. Though there is a counterargument in the nonprofit literature that higher levels of wealth can decrease the demand for nonprofit services (see Corbin, 1999; Grønbjerg and Paarlberg, 2001; Twombly, 2003), the weight of the evidence appears to suggest a positive relationship between income and the size of the nonprofit sector (Wolch and Geiger, 1983; Wolpert, 1993; Corbin, 1999; Bielefeld, 2000; Grønbjerg and Paarlberg, 2001). A primary explanation is the evidence of income elasticity in the relationship between household income and nonprofit sector growth.¹⁰ Wolch and Geiger (1983), for instance, found that higher-income community members will increase donations to organizations supporting the more disadvantaged segments of their community, while others have found evidence of growth in the nonprofit sector in more affluent communities due to the rise of "amenity services" (e.g.,

⁸There are important caveats with regard to this set of hypotheses, however. Urbanization has been posited as interfering with support for the nonprofit sector (Lincoln, 1977), while several studies (Lincoln, 1977; Gamm and Putnam, 1999; Skocpol, Ganz, and Munson, 2000) have found greater organizational participation and larger or denser nonprofit sectors in smaller, more stable communities. If this is the case, then one would find negative relationships between nonprofit organizational foundings and population density, size, and change.

 $^9 {\rm Since}$ the Census-based data are available only decennially, we use year 2000 data to measure household income.

¹⁰We thank an anonymous reviewer for pointing out this connection.

education and arts organizations) (Bielefeld, 2000) geared toward "middleand upper-income patrons" (Wolch and Geiger, 1983; Wolpert, 1993).

Similarly, *Unemployment* (number of unemployed in 1,000s, 2001) and *Change in Unemployment* (the change in county unemployment rate from 2001 compared to 2000) have been incorporated in order to capture the state of the community's economic performance (U.S. Bureau of Labor Statistics, 2001). We expect that the better the state of the local economy, the faster the growth of the nonprofit sector.

We also include a measure of the Number of Residents 65 Years of Age and Older (1,000s of residents, 2001). Not only has this segment of the community been found to be especially active in sustaining civil society (Wolch and Geiger, 1983; Putnam, 1993b, 1995, 2000), but a large proportion of the services delivered by voluntary social service organizations are consumed by senior citizens.

Finally, we include a measure of *Federal Government Spending*, as measured by total federal government expenditures (\$1,000,000s) in each county in fiscal year 2001 (U.S. Bureau of the Census, 2002b). As argued above, there are two competing hypotheses for this variable. First, if the two sectors are involved in a conflictual zero-sum relationship and for that reason are essentially "substitutable" (as discussed in Young, 2000), then we will see an inverse relationship between government expenditures and the growth of the nonprofit sector as government expansion "crowds out" nonprofit organizations (Nisbet, 1962). If, on the other hand, the government and nonprofit sectors are complementary "partners," we should expect government spending to positively impact the growth of the nonprofit sector (Salamon, 1996; Salamon and Anheier, 1997, 1998; Bielefeld, 2000; see also Hannan and Freeman, 1987).

Estimation Procedure, Results, and Discussion

~

$$\mu_{i} = \exp(\rho_{0} + \rho_{1}Diversity \text{ of Friendships} + \rho_{2} \text{ Foutical Engagement} \\ + \beta_{3} \text{ Giving and Volunteering} + \beta_{4} \text{ Associational Involvement} \\ + \beta_{5} \text{ Informal Social Networks} + \beta_{6} \text{ Social Trust} \\ + \beta_{7} \text{ Population Density} + \beta_{8} \text{ Population Size} \\ + \beta_{9} \text{ Change in Population} \\ + \beta_{10} \text{ Median Household Income} \\ - \beta_{11} \text{ Unemployment} - \beta_{12} \text{ Change in Unemployment Rate} \\ + \beta_{13} \text{ Residents} > 65 + \beta_{14} \text{ Government Spending} \\ + \beta_{15} \text{ Organizational Density} \\ + \beta_{15} \text{ Prior Organizational Foundings}) \delta_{i}$$

(0 + 0 D) (C E) U (D D) (C E)

We estimate the above model using 2000-2001 data from 284 U.S. counties through the use of an event count regression model. As with most

count data, our dependent variable includes a high number of non- and lowfrequency occurrences with a Poisson-like distribution. The mean level of nonprofit foundings per county is 41.81, with a standard deviation of 133.81. We find that the dispersion in our data is greater than would be expected for a traditional Poisson distribution and consequently estimate our model using a negative binomial estimation technique.¹¹ In addition, we estimate robust standard errors clustered on the state. These corrections eliminate any effect from heteroskedasticity on the standard errors and allow us to control for the nonindependence of counties within the same state.¹² Furthermore, such corrections make it more difficult to obtain statistically significant coefficients and thus lend further confidence to the validity of our results. Incident-rate ratios are presented in italics below the regression coefficients in Table 1.

The results presented in Table 1 clearly illustrate that only certain dimensions of social capital have a significant positive impact on nonprofit foundings. Indeed, only the diversity of friendships and conventional political engagement lead to an increase, while giving and volunteering, associational involvement, and informal social ties have no significant impact on not-for-profit foundings. Social trust, moreover, is shown to decrease the probability of organizational foundings.

The importance of the institutional, sociodemographic, and economic environment on the founding of new nonprofit organizations is also supported in this model. Though the population variables and the change in the unemployment rate have no significant effect on nonprofit foundings, we find that those counties with wealthier, older populations (p = 0.101), lower levels of unemployment, and higher levels of government spending are shown to be generally more conducive to the development of nonprofit organizations.

Of special note in regard to the environmental variables is the finding that several social capital variables are shown to significantly improve the likelihood of nonprofit births even when we control for the richer and older populations that would be predisposed to higher levels of social capital and civic engagement. This suggests that it is the general level of social capital in a county, rather than just the presence of populations that are prone to higher levels of social capital to begin with, that leads to significantly higher levels of nonprofit foundings.

¹¹The α value for our negative binomial model is 0.687 ($\bar{\chi}^2 = 3204.46^{***}$), indicating the inappropriateness of the Poisson model, which assumes that $\alpha = 0$.

¹²Robust, or Huber-White corrected, standard errors approach traditional standard errors if the data are not heteroskedastic. Therefore, the majority of researchers apply this relatively cost-free "correction" to their standard errors. By clustering observations on the state we are able to control for the fact that counties across states are independent of one another but that counties within the same state are affected by similar structural, legal, and, potentially, economic factors.

TABLE 1

| CoefficientRobust Std. ErrorZP>IzSocial Capital VariablesDiversity of friendships0.813*0.4721.720.085(2.256) |
|--|
| Diversity of friendships 0.813* 0.472 1.72 0.085 (2.256) |
| Diversity of friendships 0.813* 0.472 1.72 0.085 (2.256) |
| (2.256) |
| |
| Political engagement 0.782* 0.430 1.82 0.069 |
| (2.187) |
| Giving and volunteering 0.488 0.415 1.18 0.239 |
| (1.630) |
| Associational involvement -0.737 0.629 -1.17 0.242 |
| (0.479) |
| Informal social networks -1.756 2.181 -0.81 0.42 |
| (0.173) |
| Social trust -2.952*** 0.733 -4.03 0.000 |
| (0.052) |
| Environmental Variables |
| |
| Population density -0.028 0.104 -0.27 0.790 (0.999) |
| |
| |
| (0.999) Change in population -0.014 0.014 -0.99 0.320 |
| |
| (0.999) 0.035*** 0.001 0.50 0.000 |
| Median household income 0.075*** 0.021 3.58 0.000 |
| (1.000) |
| Unemployment -0.133* 0.070 -1.90 0.057 |
| (0.999) |
| Change in unemployment rate 4.003 5.144 0.78 0.436 |
| (54.787) |
| Residents > 65 0.025 0.015 1.64 0.10 ⁻¹ |
| (1.000) |
| Government spending 0.0001* 0.0008 1.72 0.086 |
| (1.000) |
| Ecological Variables |
| Organizational density 0.001** 0.0004 2.27 0.023 |
| (1.000) |
| Prior organizational foundings - 0.005 0.010 - 0.53 0.593 |
| (0.995) |
| _cons -8.209*** 2.288 -3.59 0.000 |

* $p \le 0.1$; ** $p \le 0.05$; *** $p \le 0.01$ for two-tailed tests of significance. Log likelihood = -949.00, $\chi^2 = 449.4$ ***, N = 284.

Of the ecological variables, prior organizational foundings are not statistically significant, while higher levels of nonprofit organizational density are shown to lead to an increased likelihood of nonprofit births.¹³ Because

¹³There is debate over whether the impacts of density and prior foundings are monotonic or curvilinear. We therefore also tested for an inverted-U relationship between foundings and

this article examines a wide range of nonprofit organizations (rather than specific industries) that are not necessarily in competition with one another, this positive monotonic relationship between organizational density and foundings is to be expected.

As noted above, our central hypothesis is that community-level variation in levels of social capital can meaningfully be used to explain differences in the growth of a community's aggregate nonprofit sector. Justifiably, some may wonder whether the relationships seen above for the nonprofit sector as a whole would hold were we to examine discrete subsectors of the nonprofit economy. To test if there are important intersectoral differences in how social capital affects organizational foundings, we divided the sample used above into arts, education, health, human service, religious, philanthropic, and other organizations using the federal government's National Taxonomy of Exempt Entities (NTEE) classification scheme.¹⁴ We find that, just as in our aggregate sample, bridging social capital has an important positive impact, and social trust a negative impact, on the founding rates in each of the seven nonprofit sectors.¹⁵ Overall, we find that the results presented in Table 1 translate rather well to the separate subsectors.¹⁶ Given the overall robustness of these findings, we do not include them in this article.

To clarify the impact of the significant social capital, environmental, and ecological variables, we also present the percentage change in expected nonprofit foundings for set increases in each of the significant independent variables in Table 2. Changes in the expected founding counts for set unit increases in the level of the variables are presented in the right-hand column in bold, while the changes for one standard deviation increases are presented in parentheses below. Because the standard deviations for several variables are quite large, we suggest examining the coefficients for the unit changes

¹⁴Subsectors (with NTEE codes): arts (A), education (B), health (E, F, G, H), human services (P), religion (X), philanthropy (T), and other (all other codes).

¹⁵Conventional Political Engagement has an overwhelmingly positive (but not significant) relationship with founding rates in each of the seven subsectors.

¹⁶As with the aggregate results, median household income, government spending, the number of residents 65 years or older, prior subsector organizational foundings, and subsector organizational density have overwhelmingly significant and positive impacts on organizational foundings in each of the discrete subsectors. However, there are some note-worthy intersectoral differences. We find that *Giving and Volunteering* has a positive significant relationship with founding rates for arts, education, human service, religious, and philanthropic organizations (but a nonsignificant coefficient for health and other types of organizations). In addition, *Associational Involvement* has a surprisingly negative, significant relationship with arts and philanthropic organizations, and *Informal Social Networks* has a significant negative impact on foundings for religious organizations.

the two ecological variables using an exponential quadratic model, as suggested by, among others, Carroll and Hannan (1989), Tucker, Singh, and Meinhard (1990), and Singh and Lumsden (1990). We found little support here for an inverted-U relationship: as with the results presented in Table 1, organizational density had a significant positive coefficient and prior organizational foundings had a nonsignificant negative coefficient, while the two squared terms had the expected negative but nonsignificant relationships with organizational foundings.

TABLE 2

| Variable | Percentage Change in Nonprofit Foundings |
|-------------------------------------|--|
| Diversity of friendships (+1 unit) | +125.6 |
| Political engagement (+1 unit) | (+20.2) + 118.7 (+20.9) |
| Social trust (+1 unit) | - 94.8 |
| Median household income (+\$1,000) | (-39.4) + 7.8 (+10.4) |
| Unemployment (+10,000) | (+108.4) - 73.6 |
| Residents > 65 (+10,000) | (- 93.4) + 28.6 (+635.3) |
| Government spending (+\$100,000,000 | () |
| Organizational density (+100 orgs.) | (+ 127.6) + 10.0 (+ 574.2) |

Percentage Change in the Expected Count of Nonprofit Foundings for Set Increases in Values of Significant Independent Variables

(rather than standard deviation changes) to better grasp the predicted effect of these variables on organizational foundings. For example, a standard deviation increase for *Residents* > 65 pushes the variable from its mean value of 25,669 to 105,067. An increase of 79,398 residents may have little meaning for many of the counties in this study. Consequently, we also examine the percentage change in expected foundings when the population of residents over 65 increases by 10,000. For the remaining variables, we have made value judgments for what we consider to be reasonable increases considering their respective units of measurement. Thus, we examine how organizational foundings increase when each social capital variable is increased by one unit on its respective index, when median household income is increased by \$1,000, unemployment by 10,000 individuals, federal government spending by \$100,000,000, and organizational density by 100 organizations.

It is difficult to compare different unit changes across variables, but these statistics provide an excellent illustration of the substantive importance of each indicator for founding rates. The direction of the relationships parallel those presented in Table 1. However, the magnitude of impact of the different social capital variables is much clearer when one compares a one-unit increase of diversity of friendships, conventional political engagement, and social trust on the expected count of foundings. The most important of these is the diversity of friendships, which leads to a 125.6 percent predicted increase in foundings, followed by political engagement (a 118.7 percent increase) and social trust (a 94.8 percent decrease).

The environmental variables have a mixed but important effect on foundings as well. A \$1,000 increase in median household income is associated with a 7.8 percent expected increase in foundings (while a \$9,800 one-standard-deviation increase leads to a 108 percent increase). Unemployment, as expected, has a negative effect on expected foundings, where a 10,000-person increase in unemployment leads to an expected 73.6 percent decrease. In turn, a population increase of 10,000 residents over 65 leads to a 28.6 percent increase in nonprofit foundings, and a \$100,000,000 increase of government spending increases the expected founding count by only 1 percent.

Lastly, the organizational density ecological variable is seen to have an important substantive impact on organizational foundings. An increase of 100 organizations in a county has a 10 percent positive impact on new foundings. In effect, we find that, just as a healthy business community may lead to the development of new businesses, high nonprofit densities may lead to increased legitimation and further opportunities for expansion.

Implications and Conclusions

In this article we posited that the increased trust, coordination, and communication engendered by elevated community levels of social capital render it easier for individuals to come together to form new nonprofit organizations and that, in the aggregate, this will lead to the growth of the nonprofit sector. The results are interesting: the different dimensions of social capital do not have a uniform effect on nonprofit sector growth. What we found is that the "trust" component is not the critical factor in social capital's importance for the size and scope of the nonprofit sector. For social capital theorists, this study provides further evidence of the strength of political engagement and bridging ties for the vitality of the community.

These results also demonstrate that the growth of a community's notfor-profit sector is dependent on an important mix of ecological and environmental factors. Of the ecological variables, we found that preexisting organizational density (but not prior foundings) had an important impact on organizational growth. In fact, a 100-organization increase in organization density levels was associated with a 10 percent expected increase in the number of current foundings. This suggests that the "carrying capacity" of a community's nonprofit sector may actually increase (as Putnam, 1993b implies) rather than decrease with greater involvement.

Several of the environmental variables likewise proved to play a pivotal role in organizational founding patterns. As expected, communities that have greater median household incomes and lower unemployment rates experienced the fastest rates of growth in their not-for-profit sectors. The same can also generally be said for counties with older populations. Moreover, the study provides important evidence relevant to a heavily debated point in the nonprofit literature: the relationship between the government and nonprofit sectors. What we find is that federal government spending obtained a strong positive relationship with nonprofit growth. This finding does not therefore provide support for a substitution effect between the government and not-for-profit sectors; instead, as Salamon and Anheier (1997, 1998) suggest, the two sectors are better viewed as complementary "partners."

The primary focus of this study, however, is on the community-level impact of six core dimensions of social capital. Our findings demonstrate that the various dimensions do not operate as a monolithic whole. In fact, three of the dimensions—associational involvement, informal social networks, and giving and volunteering—evince no significant impact on nonprofit growth. At the same time, our findings do demonstrate that two core facets of social capital, the diversity of friendships and conventional political engagement, have an important, positive effect on the vibrancy of the nonprofit sector above and beyond the impact of the environmental and ecological variables normally studied in the organizational literature. The implications for future research are considerable. In the end, given these findings, social capital can usefully be considered another key "environmental" factor in determining major nonprofit sector outcomes.

Given the negative relationship between social trust and nonprofit foundings, future research should make a special effort to investigate the role of interpersonal trust on community-level outcomes. Fukuyama (1999) does provide a clue for why strong social trust might not help a community move ahead. Namely, such communities may lack the "weak ties" (Granovetter, 1973) through which new ideas and energy can permeate a community.

At the same time, the results confirm hypotheses (see Portes, 1998 for an overview) of the powerful role that bridging ties can play in counteracting some of the negative consequences of overly tight social networks. In the end, high levels of bridging social capital may be a key to many of our most-desired societal outcomes. Such a perspective dovetails with the current findings. Bridging social ties, measured by the diversity of respondents' friendships, had the strongest positive impact of the six social capital variables on nonprofit foundings. In short, these results suggest that bridging ties are pivotal in the growth of the nonprofit community. Increasing the diversity of citizens' formal and informal social networks has long been a goal. Our study suggests that the payoffs may be even more critical than previously thought.

REFERENCES

Abzug, Rikki, and Joy K. Turnheim. 1998. "Bandwagon or Band-Aid?: A Model of Nonprofit Incorporation by State." *Nonprofit and Voluntary Sector Quarterly* 273:300–22.

Adler, Paul S., and Seok-Woo Kwon. 2002. "Social Capital: Prospects for a New Concept." *Academy of Management Review* 27:17–40.

Baker, W. 1990. "Market Networks and Corporate Behavior." American Journal of Sociology 96:589–625.

Ben-Ner, Avner, and Theresa Van Hoomissen. 1990. "The Growth of the Nonprofit Sector in the 1980s: Facts and Interpretation." *Nonprofit Management and Leadership* 1:99–116.

Bielefeld, Wolfgang. 2000. "Metropolitan Nonprofit Sectors: Findings from NCCS Data." Nonprofit and Voluntary Sector Quarterly 29:297–314.

Carroll, Glenn R., and Michael T. Hannan. 1989. "Density Dependence in the Evolution of Populations of Newspapers." *American Sociological Review* 54:524–41.

Chung, Lai Hong, and Patrick T. Gibbons. 1997. "Corporate Entrepreneurship: The Roles of Ideology and Social Capital." *Group and Organization Management* 22:10–30.

Chung, Seungwha, Harbir Singh, and Kyungmook Lee. 2000. "Complementarity, Status Similarity, and Social Capital as Drivers of Alliance Formation." *Strategic Management Journal* 21:1–22.

Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." American Journal of Sociology (Supplement) 94:S95–S120.

Corbin, John J. 1999. "A Study of Factors Influencing the Growth of Nonprofits in Social Services." *Nonprofit and Voluntary Sector Quarterly* 28:296–314.

Fukuyama, Francis. 1999. *Social Capital and Civil Society*. Prepared for delivery at the International Monetary Fund Conference on Second Generation Reforms. Available at (http://www.imf.org/external/pubs/ft/seminar/1999/reforms/fukuyama.htm).

Gamm, G., and Robert Putnam. 1999. "The Growth of Voluntary Associations in America, 1840–1940." *Journal of Interdisciplinary History* 29:511–57.

Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78:1360-80.

Grønbjerg, Kirsten, and Laurie Paarlberg. 2001. "Community Variations in the Size and Scope of the Nonprofit Sector: Theory and Preliminary Findings." *Nonprofit and Voluntary Sector Quarterly* 30:684–706.

Grootaert, Christiaan, and Thierry van Bastelaer. 2001. Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from the Social Capital Initiative. Social Capital Initiative Working Paper No. 24. Washington, DC: World Bank.

Hannan, Michael T., and John Freeman. 1987. "The Ecology of Organizational Founding Rates: The Dynamics of Foundings of American Labor Unions, 1836–1975." *American Journal of Sociology* 92:910–43.

Haveman, Heather A. 1993. "Follow the Leader: Mimetic Isomorphism and Entry into New Markets." *Administrative Science Quarterly* 38:593–627.

Independent Sector. 2001. The New Nonprofit Almanac in Brief: Facts and Figures on the Independent Sector. Washington, DC: Independent Sector.

Kraatz, Matthew S. 1998. "Learning by Association? Interorganizational Networks and Adaptation to Environmental Change." *Academy of Management Journal* 41:621–43.

Liebschutz, Sarah F. 1992. "Coping by Nonprofit Organizations During the Reagan Years." Nonprofit Management and Leadership 2:363–80.

Lincoln, J. R. 1977. "The Urban Distribution of Voluntary Organizations." Social Science Quarterly 58:472–80.

Marcuello, Carmen. 1998. "Determinants of the Non-Profit Sector Size: An Empirical Analysis in Spain." Annals of Public and Cooperative Economics 69:175–92.

Marrett, Cora B. 1980. "Influences on the Rise of New Organizations: The Formation of Women's Medical Societies." *Administrative Science Quarterly* 25:185–99.

Minkoff, Debra C. 1995. Organizing for Equality: The Evolution of Women's and Racial-Ethnic Organizations in America, 1955–1985. New Brunswick, NJ: Rutgers University Press.

Nisbet, Robert. 1962. Community and Power. New York: Oxford University Press.

O'Neill, Michael. 2002. Nonprofit Nation: A New Look at the Third America, rev. ed. San Francisco, CA: Jossey-Bass.

Pennings, Johannes M. 1982. "Organizational Birth Frequencies: An Empirical Investigation." *Administrative Science Quarterly* 27:120–44.

Pennings, Johannes M., Kyungmook Lee, and Arjen van Witteloostuijn. 1998. "Human Capital, Social Capital, and Firm Dissolution." *Academy of Management Journal* 41:425–40.

Pierce, John C., Nicholas P. Lovrich, Jr., and C. David Moon. 2002. "Social Capital and Government Performance: An Analysis of 20 American Cities." *Public Performance and Management Review* 25:381–97.

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." Annual Review of Sociology 24:1–24.

Putnam, Robert D. 1993a. *Making Democracy Work: Civic Traditions in Modern Italy.* Princeton, NJ: Princeton University Press.

——. 1993b. "The Prosperous Community: Social Capital and Public Life." American Prospect 13:35–42.

——. 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6:65–78.

_____. 2000. Bowling Alone: The Collapse and Revival of American Community. New York: Simon and Schuster.

Romo, Frank P., and Michael Schwartz. 1995. "Structural Embeddedness of Business Decisions: A Sociological Assessment of the Migration Behavior of Plants in New York State Between 1960 and 1985." *American Sociological Review* 60:874–907.

Saguaro, Seminar. 2001. Social Capital Community Benchmark Survey: Executive Summary. Saguaro Seminar at the John F. Kennedy School of Government, Harvard University.

Salamon, Lester M. 1996. *Partners in Public Service: Government-Nonprofit Relations in the Modern Welfare State*. Baltimore, MD: Johns Hopkins University Press.

Salamon, Lester M., and Helmut K. Anheier. 1997. "The Civil Society Sector." Society 34:60-65.

——. 1998. "Social Origins of Civil Society: Explaining the Nonprofit Sector Cross-Nationally." *Voluntas* 9:213–48.

Schafft, Kai A., and David L. Brown. 2000. "Social Capital and Grassroots Development: The Case of Roma Self-Governance in Hungary." *Social Problems* 47:201–19.

Singh, Jitendra V., and Charles J. Lumsden. 1990. "Theory and Research in Organizational Ecology." *Annual Review of Sociology* 16:161–95.

Skocpol, Theda, M. Ganz, and Z. Munson. 2000. "A Nation of Organizers: The Institutional Origins of Civic Voluntarism in the United States." *American Political Science Review* 94:527–46. *Social Capital Community Benchmark Survey.* 2001. Saguaro Seminar, John F. Kennedy School of Government, Harvard University. Available at (http://www.ropercenter.uconn. edu/scc_bench.html) [computer file].

Sørensen, Jesper B., and Olav Sorenson. 2003. "From Conception to Birth: Opportunity Perception and Resource Mobilization in Entrepreneurship." *Advances in Strategic Management* 20:89–117.

Sorenson, Olav, and P. G. Audia. 2000. "The Social Structure of Entrepreneurial Activity: Geographic Concentration of Footwear Production in the U.S., 1940–1989." *American Journal of Sociology* 106:324–62.

Tucker, David J., Jitendra V. Singh, and Agnes G. Meinhard. 1990. "Organizational Form, Population Dynamics, and Institutional Change: The Founding Patterns of Voluntary Organizations." *Academy of Management Journal* 33:151–78.

Twombly, Eric. 2003. "What Factors Affect the Entry and Exit of Nonprofit Human Service Organizations in Metropolitan Areas?" *Nonprofit and Voluntary Sector Quarterly* 32:211–35.

Urban Institute, National Center for Charitable Statistics. 1995–2002. IRS Business Master Files, 1995–2002 [computer file].

_____. 2003. *Website*. Available at (http://nccs.urban.org/).

U.S. Bureau of Labor Statistics. 2001. *Local Area Unemployment Statistics*. Washington, DC: U.S. Dep't of Labor, Bureau of Labor Statistics. Available at (http://www.bls.gov.lau?).

U.S. Bureau of the Census. 2001. *Population Estimates Program*. Washington, DC: U.S. Dep't of Commerce, Bureau of the Census. Available at (http://eire.census.gov/popest/data/ counties.php).

------. 2002a. County and City Data Book: 2000. Washington, DC: U.S. Dep't of Commerce, Bureau of the Census.

-------. 2002b. Consolidated Federal Funds Report, Fiscal Year 2001. Washington, DC: U.S. Dep't of Commerce, Bureau of the Census.

Uzzi, B. 1997. "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness." *Administrative Science Quarterly* 42:35–67.

Van Schaik, Ton. 2002. "Social Capital in the European Values Study Surveys." Paper prepared for the OECD-ONS International Conference on Social Capital Measurement. London.

Walker, G., B. Kogut, and W. Shan. 1997. "Social Capital, Structural Holes and the Formation of an Industry Network." *Organization Science* 8:109–25.

Wolch, J., and R. K. Geiger. 1983. "The Urban Distribution of Voluntary Resources: An Exploratory Analysis." *Environment and Planning A* 15:1067–82.

Wolpert, Julian. 1993. *Patterns of Generosity in America: Who's Holding the Safety Net?* New York: Twentieth Century Fund Press.

Woolcock, Michael. 1998. "Social Capital and Economic Development: Toward a Theoretical Synthesis and Policy Framework." *Theory and Society* 27:151–208.

Young, Dennis R. 2000. "Alternative Models of Government-Nonprofit Sector Relations: Theoretical and International Perspectives." *Nonprofit and Voluntary Sector Quarterly* 29:149–72.

Copyright of Social Science Quarterly is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.