Membership Organization’s Social Capital and the Impact on Nonprofit Sector Management

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ABSTRACT

Social capital depicts the extent of mutual trust in a jurisdiction. This study examines the impact of organizational social capital (OSC) on nonprofit (NP) density. Prior studies have argued that OSC positively impacts the community and the organization itself. These studies are either theory-based or survey based. Few available empirical studies also do not examine the OSC of all the counties of the United States. This study overcomes these limitations and finds from the US county-level empirical study that social capital advanced in membership organizations is positively associated with the growth of NP density.

KEYWORDS

Organization social capital; nonprofit; membership organization; government failure

Introduction

Scholars have usually settled on the notion that the late nineteenth and early twentieth centuries experienced an increase in membership organizations in the United States. Theoretical studies have examined the membership organizations regarding the historical background, their growth in the United States, and their capability in attracting voluntarism, trust, and charitable activities (Gamm & Putnam, 1999; Skocpol, Ganz, & Munson, 2000). Skocpol et al.’s (2000) study demonstrate that traditionally smaller communities had a higher number of membership organizations. Similarly, Lincoln (1977) and Gamm and Putnam (1999) suggest that the membership organizations are more likely to thrive in steady communities, in contrast to “a pattern of organizational barrenness in rapidly changing communities” (Lincoln, 1977, p. 480). However, the origin of the concept “social capital” dates back to very early in human civilizations, “most notably and widely utilized generated in ancient Persia and later on during Islamic, and perhaps other religious, environments” (Farazmand, forthcoming; forthcoming-a). Fostering a community based, collective-and-team-oriented culture as part of the democratic Persian Administrative Culture throughout the 220 years of the ancient world’s largest Empire of Achaemenid Persia (559–230 BC), social capital values were promoted and enhanced both officially and unofficially through volunteer social service systems ingrained in the Persian administrative system. Activities like the (a) traditions of ten-twenty day per year volunteered labor for public work and service provisions in villages and towns,
(b) volunteered offering of ‘neighborly hands’ to poor or any neighbors in need of urgent care or assistance to build or repair houses or harvesting under threat of rain, (c), and cooperative arrangements by people at public institutions as well as local hospitals, schools, and recreation systems and activities are but three examples (Farazmand, forthcoming). Later on, during the Sassanid Empire of Persia (3rd–7th centuries) and under Islamic Iran, the notion of “communities of citizens taking care of elderly people by the younger ones in community” was a common practice (Farazmand, forthcoming). They would not kill the old aged people by dropping off the cliffs; instead, as clearly emphasized by the philosopher Farabi in his Virtuous City, the older people were highly respected and taken care of showing respect for their contributions to human communities as a “social capital” (Farazmand, forthcoming, forthcoming-a). These traditions have persistently survived for millennia in modern Iranian culture even to the twenty-first century. Similar
traditions maybe found in many other cultures with different social and religious systems, mainly in societies with strong traditions as well in socialist systems. But, contemporary literature on social capital is still growing with a long way to go.

This paper empirically examines the relationship between organizational social capital and nonprofit organization (NPO) using US county-level data. For this paper, the social capital developed in the membership organizations is referred to as the “organizational social capital.” As such, organizational social capital is created within an organization because of the networks, mutuality, and conviction of the organizational members; it is mostly an internal organization social capital as a focus of this paper.

Social capital has been discussed in various academic fields, and different scholars are credited for promoting and popularizing the concept of social capital in the contemporary world. The modern traditions are found in different parts of the world, including especially Russia, not just under the Soviet Union, but also as part of the Russian culture, in Belarus, Bulgaria, and elsewhere. Social capital has been studied and popularized in the field of political science by Putnam (1995), Putnam (2000); Putnam & Feldstein, 2003); sociology by Coleman (2008); philosophy and anthropology by Bourdieu (1979 [1984], 1986; Bourdieu & Wacquant, 1992); and international development by Woolcock and Narayan (Woolcock, 1998; Woolcock & Narayan, 2000). Social capital discussed by the scholars of every field has the essence of it as a resource which results from the “relationships” that could be among individuals or societies or communities or organizations (Bolino, Turnley, & Bloodgood, 2002, p. 506). Schneider (2009) theoretically applies the concept of social capital to nonprofits as “organizations.”

The underlying assumption of the OSC research is that organizational members have a similar view about their work environment which eventually supports their working relationship. However, the available studies on OSC are subject to some limitations. First, research on OSC is either purely theoretical or survey based on the selected organizations. Second, prior research does not examine the OSC of all the US counties. Likewise, Bolino et al. (2002) point to the inadequate attention of scholars on the development of organizational social capital.

Therefore, this paper intends to contribute to further understanding of whether the social capital created in membership organizations (also known as OSC) that affect the nonprofit density by empirically testing their relationships. The abovementioned limitations are addressed by using the US county-level panel data analysis. Hence, this paper posits that the impact of OSC on nonprofits has a positive effect on the density of NP by empirically testing the hypotheses.

Literature review

Social capital

A growing number of studies (Lee & Kim, 2010/2011; LeRoux, Brandenburger, & Pandey, 2010; Provan, Veazie, Staten, & Teufel-Shone, 2005) have acknowledged the increasing prominence of individuals’ social connections. Features that make social connection viable are trust, reciprocity, cooperation, network, and association.

Social capital, defined and used in a different context, is viewed as a concept or theory that lacks consensus on its definition and meaning. This concept is characterized as “slippery” (Onyx & Bullen, 2000, p. 24) because it is poorly defined. However, the contribution of social capital at the individual, community, and organizational level has been highly discussed in the literature. Social capital has its origin in several theoretical traditions. The influential theorists of social capital are Coleman (2008), Putnam (1993), and Fukuyama (1995). Robert Putnam is credited for popularizing the concept of social capital although he drew the idea from Coleman.
The definitions of social capital by these influential theorists highlight the diversity of the concept of social capital.

- Social capital can be defined as “features of social organization, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit” (Putnam, 1995, p. 67).

- Social capital refers to “a variety of different entities, with two elements in common: they all consist of some aspect of social structure, and they facilitate certain actions of actors – whether personal or corporate actors – within the structure” (Coleman, 2008, p. 598).

- Fukuyama (1995) defines social capital related to cultural values such as kindness, philanthropy, and acceptance.

To Coleman (1990) social capital is a concept about networks of civic engagement, a set of social resources, and stimulation, of “willingness in people to donate their time and money in a community” (Merrett, 2001, p. 407) that generates reciprocity, trust, and encourages divergent impact on giving (Brooks, 2005). Such networks are associated with societal outcomes such as pro-social attitudes, active voluntary participation, cohesiveness and donation practice (Putnam, 1995, 2001). Social capital broadens the members’ sense of self, improves the members’ reasoning for collective benefits, and encourages the emergence of social trust.

The concept of social capital is associated with several applied areas. For instance, Brehm and Rahn (1997) demonstrated a connection between social capital and trust in government; Oliver (1999) linked the social capital to economic segregation; and Roch et al. (2000) associated the social capital to the ability of communities to react to changes in the law (Brooks, 2005, p. 2–3). A theoretical and practical connection of social capital with such applied areas suggests the broader implication of social capital.

The two-way research between social capital and organization is evident in the literature. In other words, studies have been conducted on the impact of social capital on an organization and on the organization’s role in creating social capital. Onder (2011) concluded in his cross-national study that social capital regarding the country’s social trust has a likelihood of increasing the size of NPO. Merrett (2001) examined the effectiveness of social capital in supporting a local welfare system. Morris (2000) inferred that third sector organizations foster social capital. Brooks (2005) acknowledged the influence of social capital on the effectiveness of the public sector and stated that “social capital might improve the functioning of the nonprofit and voluntary sector by stimulating more resources through charitable donations” (p. 1). Passey and Lyons (2006) explained the role of the nonprofit organization on reproducing social capital. King (2004) suggested that nonprofits must raise and nurture social capital for the benefit of an organization and its employees. Empirical analysis of Saxton and Benson (2005) report that several forms of social capital impact NPS. Isham, Kolodinsky, and Kimberly (2006) outlined the benefit nonprofit organizations can receive from social capital.

Social capital is the resource that emerges from relationships that can be used to reach the goal of the common good (Bartkus & Davis, 2009). It can also help to overcome communal problems such as crime, drugs, and alcohol (Putnam, 2000). Social network plays a vital role of facilitating communication and coordination, which in turn, makes it possible to resolve the collective action problems (Rupasingha, Goetz, & Freshwater, 2006; Wollcock, 2001). As such, social capital drives people to participate in “community activities, political engagement, and various forms of trust” (Brooks, 2005, p. 1).

Organizational social capital
The concept of ‘organizational social capital’ used in this study is the social capital developed in the membership organizations. Membership organizations explained in this study are different from the nonprofit organizations. While membership organizations operate primarily on membership fees, nonprofit organizations receive charities, donations, grants, and government funds to cover operating cost. The membership organizations comprise bowling centers, physical fitness facilities, public golf courses, sports club, civic and social associations, religious organizations, business associations, political organizations, professional organizations, and labor organizations (Rupasingha et al., 2006; US Dept of Labor).

Membership organization provides a wide variety of services for its members depending on the nature of the organization. US Department of Labor categorizes membership organizations in a major group 86 and describes that membership organizations that operate on a membership basis promote the interests of their members. For example, religious organizations such as churches, convents, monasteries, and temples are established with the purpose of worshipping, providing religious training or study, or for promoting religious activities. Similarly, professional organizations such as bar associations, dental associations, and engineering associations are established to advance the members’ professional interests. Members of these organizations stay connected because of their common interests, and it can furnish in generating social capital. Also, a positive and long-term relationship between members supports the survival of these organizations (Ki & Hon, 2012).

Membership organizations, as other organizations, are established with some steady expectations. Both organizations and members set the expectations on responsibilities and relationships. When two-way expectations are reliably carried out in an organization, social capital is generated because of the network, trust, reciprocity, and cooperation (Stogdill, 1950). Moreover, it takes active involvement and enthusiasm to volunteer from the organizational members for OSC to form a recognizable shape.

Scholars have widely studied social capital in the organizational context and defined them in various ways. For instance, Schneider (2009) theoretically examines the role of social capital in nonprofits and defines OSC as “established, trust-based networks among organizations or communities supporting a particular nonprofit, which an organization can use to further its goals” (p. 654). Leana and van Buren (1999) define organizational social capital as a “resource reflecting the character of social relations within the organization” (p. 538).

Bourdieu (1986), on the other hand, describes social capital as the collection of resources which are linked to the ownership of a “membership in a group” in an institution (Heuser, 2005, p. 9–10). Hence, social capital provides a “credential” to the members of an organization that entitles them to recognition. Brower, Schoorman, and Tan (2000) and Bourdieu (1986) posit that “social capital requires a relational focus; and relationships are the basis for commitments, trust, information exchange, and resources” (King, 2004, pp. 472–473). Therefore, “good organizational citizens” (Bolino et al., 2002) could contribute to the organizational social capital.

Individuals with some form of relationship with an organization contribute to the social capital of the organization. For instance, organizational staffs develop social capital through their work network based on their work histories, existing peer groups, similarities in job assignment, and so on. Therefore, social capital becomes an attribute of an organization that is reflected through the social relation maintained by the members through shared trust. As explained above, the characteristics of social capital entail strong faith, active personal network, and mutual understanding. This sense of trust, communication, participation, and sharing bridges the gap between people that can make an organization more coherent.
The above explanation clarifies that social capital results from the organizational members’ networks. The existence of social capital in an organization can be recognized from the “institutionalized culture, norms, values, and cohesiveness” that are already present in an organization (Waldstrøm, 2003).

Social capital in the nonprofit sector

Several contributions of the nonprofit sectors have been pointed out by the scholars (Frumkin, 2002; Kramer, 1981), such as “the service-provider role,” “the vanguard role,” “the value-guardian role,” and “the advocacy role” (Anheier, 2014, p. 293). As discussed above, social capital is studied in several academic fields. Nonprofit scholars have shown the most significant interest in the study of social capital. The empirical understanding of the OSC’s role in the nonprofit sector is still in its early phase and is unsettled so far. Some studies, including Tantardini & Kroll’s (2015) recommend the need for empirical exploration on the relationship between organizational social capital and the nonprofit sector.

“Nonprofits do more than fill in for market or government failures” (Bryce, 2006, p. 311). This statement has been proved appropriate in several aspects, particularly on the role of NP in bringing together the people in creating active communities. A high level of social capital makes people more cohesive, and therefore people like to work together. This positivity increases the likelihood of people on volunteering, active participation, reciprocity, and donation practices that link to the increase in nonprofit density.

Prior studies have pointed out the concept of social capital as an essential and reconcilable component for nonprofit organizations. Schneider (2009) points out that most of the research that examines the relationship between social capital and nonprofits are focused either on the role of nonprofits in strengthening civic engagement or on the manner nonprofits form social capital for individuals related to an organization. King (2004) has explicitly mentioned that nonprofits should execute their role to “recruit and develop board members, raise philanthropic support, develop strategic partnerships, engage in advocacy, enhance community relations, and create a shared strategic vision and mission within the organization and its employees” (p. 471).

Social capital creates demand for the nonprofit sector by creating a sense of bonding, participation, and cooperation between people. It can also improve nonprofit activities by stimulating financial resources such as charities and donations. Social capital, therefore, provides a perspective for the growth of the nonprofit sector.

Government failure theory

Government failure theory is a nonprofit theory that explains the growth and magnitude of the nonprofit sector. Numerous studies have empirically investigated the growth and scope of the nonprofit sector. Studies by Lecy & VanSlyke (2013), Matsunag & Yamauchi (2004), Salamon and Anheier (1998), Gazley (2008, 2010), Twombly () and Salamon and Anheier (1998) are particularly significant in understanding the essentials of the nonprofit sector.

Weisbrod (1977, 1991) advanced the government failure theory. This theory views NPO as a provider of government goods and services as the government fails to fulfill the heterogeneous demand of the public. Products, services, and programs made available by NP are claimed as an adequate replacement to the state programs because of the limitation and failure of government in executing diverse demand (Lecy & Van Slyke, 2012). Additionally, the capacity of nonprofits in influencing the charitable support from individuals, communities, and organizations have also been recognized in prior studies. Three reasons pointed out by Matsunaga & Yamauchi (2004) on the advantages of NPOs in fulfilling the heterogeneous demand of the citizens are supply targets of NPOs to non-median voters, lower labor costs,
and good access to volunteer labor. Hence, nonprofit sectors are considered a means to generate philanthropic activities. As a result, the nonprofit sector remains a reliable substitute for government and private sector provision of goods and services (Weisbrod, 2009). Farazmand (Farazmand, forthcoming-a; forthcoming-b) argues that the raid proliferation and growth of nonprofit organizations is due primarily to the rise and dominance of

the neo-conservative, neo-classical economic and political ideology of smaller government and sweeping privatization, one the one hand, and expansion of for-profit business and corporate organizations not interested in taking on social costs, on the hand: hence leaving large and growing numbers of unemployed and socially needy populations of poor, blinds, disabled, orphaned children as a result of wars and poverty, and the like in modern capitalism to the philanthropic, religious, and nonprofit institutions. These problems are inherent features and byproducts of modern corporate capitalism in the age of predatory capitalism and predatory globalization relentlessly in search of more and more accumulation of capital or wealth. In such pursuit, they create more such needy people who otherwise would end up dead under bridges and harsh environments, hence contributing to the growth of nonprofit organizations. However, such nonprofit organizations do not replace a governmentally funded social program, and they cannot be ‘dependable’ institutions in social systems of modern capitalism. The result is the failure of both government and private-business corporation leading to the inevitable growth of the nonprofit sector in the western world. Socialism is supposed to overcome this failure of modern capitalism and its business-dominated government. However, socialism has been in trouble itself in the maze of modern corporate predatory globalization that tends to claim the entire world for profit and control, a process that is leading the world increasingly into the brink of global annihilation.

Therefore, following the logic of government failure theory, as well as lack of corporate interest in absorbing the social costs of capitalism, it can be argued that social capital developed in membership organizations is vital to nonprofit organizations.

Hypothesis development

As discussed in social capital, social capital theory suggests a positive association between membership organizations and nonprofit sector. Membership organizations can foster social interactions, trust, and reciprocity. Therefore, the existence of membership organizations in a community is beneficial for NPOs as it increases the opportunity of volunteering and civic engagement (Bekkers & Wiepking, 2010; Clain & Zech, 1999; Eckel & Grossman, 2004; Penner et al., 2005).

The social norms of membership organization with a high level of social capital affect the individuals’ decision making. Prior literature supports the view that social norms influence individuals’ decisions (Cialdini, Kallgren, & Reno, 1991; Milgram, Bickman, & Berkowitz, 1969). These works of literature argue that human beings tend to develop a set of principles based on what they see around them. Individuals then behave based on those principles. As such, OSC positively influences human behavior. Organizational social capital is therefore beneficial to the nonprofit organizations because it appeals positive contribution from the individuals of a county.

Schneider (2009) points out that social capital is essential for the development and survival of nonprofit as organizations. Onder (2011) also notes the positive impact of social capital on the nonprofit organization on his cross-country empirical study. Similarly, the relations are theoretically discussed between nonprofit leaders and management of the nonprofit organizations (King, 2004). Hence, a reasonable expectation is that a community with many membership organizations creates social capital, which should have a positive effect on the growth of NPOs.

Based on the above discussion, the usefulness and compatibility of the OSC to the nonprofits can be argued. This study, therefore, hypothesizes that OSC increases the density of NPs.
H1: The degree of organizational social capital has a positive effect on the density of NPO

This hypothesis rests on the idea that if NPOs are in a county that has functional membership organizations, NPOs benefit from the social capital advanced in those membership organizations.

Alternatively, the literature on government failure emphasizes the problems with government sector’s provision of heterogeneous services. As a result, the nonprofit sector enters to fill the gap in supplying such services. Keech and Munger (2015) note the most pivotal logic behind the government failure theory as the incapability of a government to provide for the security and well-being of the citizens. Weisbrot (1977, 1991) posits that government failure means government organizations are not sufficiently responsive to the disparate preferences of citizens. Further, Lecy & Van Slyke (2013) and Keech and Munger (2015) consider the charitable activities as a substitution to state programs because of the limitation and failure of government in providing heterogeneous services.

The government failure theory argues, if the government cannot meet the public demands, then the need for NPO increases. As such, the effect of organizational social capital should also increase if the government failure is higher and vice-a-versa. Following Lecy and Van Slyke (2013), the government presence is captured using the government size which is measured as the sum of employee wages of all three levels of governments in a jurisdiction.

Based on the above discussion, it can be asserted that the degree of government presence can affect the OSC-NPO association in either direction. To test this relationship, second hypothesis is proposed based on government failure theory:

H2: The association between organizational social capital and the NP density should be larger in jurisdictions with a smaller government presence.

Data and research methods Data

This study uses a panel dataset of U.S. counties in 2000 & 2010 to test the hypotheses empirically. Many prior studies have used cross-sectional analysis (Corbin, 1999; Gronbjerg & Paarlberg, 2001; Polson, 2017). However, this study uses a panel dataset because utilizing panel data analysis allows removing some endogeneity bias caused by unobserved factors that remain unchanged for the same region over time. Analysis of data at the county- level is preferred for this research because of the availability of a wide range of data such as social, political, economic, and demographics.

For NP proxy, data is extracted from Business Master Files (BMF) dataset compiled by the National Center for Charitable Statistics (NCCS). The total number of nonprofit organizations scaled by population (per 10,000 population) captures the nonprofit density. The NP density data is calculated for the years 2000 & 2010.

For OSC proxy, data set developed by Bhandari and Javakhadze (2017) and Rupasingha et al. (2006) is used. The membership organizations, namely, religious organizations; civic associations; business associations; political organizations; professional organizations; labor organizations; bowling centers; physical fitness facilities; public golf courses; and sports club capture the social capital of an organization. These OSC data are available for years 1997, 2005, 2009 and 2014. Since social capital in a county changes very slowly over time and the data for NP density and control variables are available for years 2000 and 2010, this study uses 1997 OSC data for year 2000 and 2009 OSC data for year 2010.1
For government wage proxy, this study follows Lecy and Van Slyke (2013) and uses the sum of employee wages of all three levels (i.e., federal, state, and local) of governments in a jurisdiction.

As discussed below, the control variables are extracted from various sources, including the Census Bureau, Bureau of Justice Statistics, etc.

**Empirical models**

The hypotheses use three main variables (a) NP density, (b) Organizational Social capital, and (c) Government wage.

To test hypothesis one, the density of NPO is modeled as a function of social capital, control variables, and county fixed effects:

\[
\text{NP Density} = \beta_0 + \beta_1 \text{OSC} + \gamma_1 \text{incomes} + \epsilon_1 \text{ (1)}
\]

Where variables are defined in Table 1.

NP Density is the dependent variable of this study. A total number of nonprofit organizations scaled by the population (in 0000, i.e., ten thousand) is used as a measure of nonprofit density to capture the growth of nonprofits. It aims to explain the impact on NP density of all the counties of the United States.

Independent variable is labeled as OSC.Standardized (a standardized measure of the organizational social capital). OSC.Standardized is measured as the total number of social organizations available per 10,000 population in the county, divided by ten, i.e., number of membership social organizations. Consistent with Hypothesis one, a positive coefficient (\(\beta_1 > 0\)) is expected, which would provide evidence that NPO density increases with the degree of social capital. In the robustness test, a model is estimated where the interpolated values of social capital for years 2000 and 2010 are used. Continuing with Hypothesis one, a positive coefficient (\(\beta_1 > 0\)) is expected.

Control variables include education, crime index, unemployment rate, urban ratio, poverty, income subsidies, federal grant, population, median household income, Gini index, and religious heterogeneity. These control variables are consistent with prior research (Rupasingha et al., 2006; Lecy & VanSlyke, 2013; Kim, 2015) and are discussed in the following paragraphs.

Education is measured as a percentage of a population of 25 years with a bachelor’s degree or higher. Education is believed to reflect the intellectual human resources for NPOs (Ben-Ner and Van Hoomissen, 1992). Wolpert (1993) and Themudo (2009) have found a positive relationship between education and vibrant NPOs of a county.

The crime index is measured as the total number of violent and property crimes per 10,000 population in the county. It is based on the crime statistics data extracted from the Bureau of Justice Statistics. The urban ratio is calculated as the total urban population divided by total population in the county. Income subsidies is calculated by combining the census variables for direct federal payments for individuals like social security and retirement payments and other direct payments to individuals.

A federal grant is measured as the amount of federal grants spent in the county during the fiscal year. Lecy and Van Slyke’s (2013) definition is followed to measure this variable.

**Sample**

Median household income is measured as the median value of household income in the county. Prior empirical research shows varied results on the relationship between median household income and 501 (c) (3) organizations. For instance, Lecy and Van Slyke (2013), Saxton and Benson (2005), and Gronbjerg and Paarlberg (2001) find positive empirical evidence on the region that has a higher median household income. On the contrary, Matsunaga and Yamauchi (2004) and Ben-Ner and Van Hoomissen (1992) find a negative relationship between these variables.
Religious heterogeneity is calculated as the difference between one and Herfindahl-Hirschman Index (HHI):

Religious Hetero:

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Where rel_adherents is the number of adherents for religion i, one of the 17 major religious families as defined by ARDA. The 17 religious denominations are: Adventist, Baptist, Catholicism, Communal, Eastern Liturgical, Episcopal, Anglicanism, European Free Church, Holiness, Judaism, Latter day Saints, Liberal, Lutheran, Methodist Pietist, Pentecostal, Presbyterian Reformed, Restoration Movement, and other groups. By construction, both heterogeneity indexes range from zero to one, and a higher value represents more heterogeneity.

The unemployment rate is measured as an unemployment rate of a county. Poverty is measured as the people of all ages in poverty (in thousands) in the county. The population is measured as total population in the county. Gini index is measured as a Gini index of the county.

To test hypothesis two, the sample of government size is divided into high government presence and low government presence. Government size is calculated as a sum of government employees’ wage of all three levels of governments – federal, state, and local. A separate regression is conducted with a sample of a high degree of government presence and a low degree of government presence to test whether the effect of social capital vary cross-sectionally across these two samples. The median value of the government wage is used to split counties into two groups: one with a high degree of government presence and another with a low degree of government presence. Consistent with Hypothesis two where the main analysis is run on low government presence sample and high government presence sample, a coefficient on social capital for low government presence sample is expected to be significantly higher than coefficient on high government presence sample

(i.e., \( \alpha_h \) at low government presence sample > \( \alpha_h \) at high government presence sample).

Descriptive statistics

The descriptive statistics are reported in Table 2-Panel

A. The mean (median) of NP density is 59.81 (51.51) non-profit organizations per 10,000 population in a county. The mean (median) of OSC_Standardized is

1.32 (1.21). On average, Government wage of a county is $2129.78.

The map of NPO density and social capital index is presented in Figure 1. As shown in Figure 1, both NPO density and social capital index show a positive correlation but differ remarkably across jurisdictions. It is worth noting that some states such as Nevada and Oregon have high value of NPO density despite low value of social capital index (organization social capital standardized).

Results

The correlation matrix is reported in Table 2-PanelB. The correlation of 0.595 between NP density and OSC_Standardized is significant (p, 0.01), consistent with higher social capital being associated with higher NP density. NP density is also significantly correlated with control variables. For instance, the correlation of NP density with crime index, unemployment rate, and urban ratio are −0.178, −0.126, and −0.192 respectively. They are all significant at 0.01 level, consistent with negative association between crime, unemployment, and urbanization with the NP density.
Tables 3 and 4 present the regression results that test hypothesis one. Table 5 illustrates the regression result that tests hypothesis two by separating counties into a sample of high government presence and a low government presence. All models in Tables 3–5 include county and year fixed effects and reported significance is based on robust standard errors of two-tailed tests, adjusted for heteroscedasticity and clustered by county (related t-statistics are reported in parentheses). ***, ** and * represent significance at 1%, 5% and 10% levels, respectively.

**Test of social capital hypothesis (H1)**

A regression analysis is conducted to test whether the organizational social capital has a positive effect on the density of NP. Table 3 presents the main result for hypothesis one. Organizational social capital(OSC.Standardized) has a positive and a statistically significant association with NP density. The coefficient of OSC.Standardized is 4.080 and is significant at 1%. As reported in Table 3, the adjusted R-squared for the model is 52.89%, indicating that model well explains the nonprofit density. Thus, Hypothesis one is supported.

Control variables such as education (log), crime index, income subsidies, and population (log) also have the anticipated results. While education and income subsidies have a positive impact of the NP density, crime index, and population (log) have a negative effect on the NP density. It is also interesting to note that religious heterogeneity has a negative impact on the NP density. Other variables have no significant association with the NP density.

Column 2 of Table 3 indicates that results are consistent if the raw values of social capital (OSC.raw) are used instead of the standardized values.

An additional robustness analysis is conducted to test hypothesis one. Table 3 analysis is replicated using the interpolated values of social capital. That is, instead of using 1997 social capital data for the year 2000 and 2009 social capital data for the year 2010, social capital data for the year 2000 and 2010 were interpolated using the available data for the year 1997, 2005, 2009 and 2014. The standardized and raw values of social capital for the years 2000 and 2010 were calculated using the interpolated values. Columns 1 and 2 in Table 4 indicate that results are consistent using the interpolated values of social capital, suggesting the positive effect of OSC on the NP density.

**Test of government presence hypothesis (H2)**

The regression results of government presence hypothesis is presented in Table 5 that examines whether the effect of organizational social capital on NP density varies by the degree of government presence. As explained in data and research methods, the median value for the government wage is used to divide counties into two groups, one with a high degree of government presence and another with a low degree of government presence.

For both OSC.Standardized and OSC.Raw as the proxy for OSC, the regression results suggest that the impact of OSC is higher in a county that has low presence of the government. Thus, it supports the government failure theory, suggesting that nonprofit sector enters to fill the gap of government services.

Control variables have different levels of significance for the government presence. For example, the crime index and federal grant have a negative effect on the low government presence but have no significance in the high government presence. The unemployment rate, on the other hand, has a negative impact on the low government presence and positive impact on the high government presence. In contrast, the population has a negative impact on both low and high government presence.
Discussion and conclusion

This study examines whether the social capital formed in membership organizations can influence the density of the nonprofit organizations. Two separate streams of the literature drive the research question. First, social capital literature illustrates that mutual trust, cooperation, and reciprocity differ across regions and that such differences can influence the growth of the nonprofit organizations. Second, the literature on government failure shows that the inefficiency of the government system leads to the increasing need for nonprofit organizations in which organizational social capital plays a crucial role.

Building on these two streams of literature, this study argues that factors contributing to social capital can advance the development of the nonprofit organizations by providing an appropriate environment and better resources. Theoretically, a community with a membership-based organization is such a factor. Additionally, the degree of government presence can be considered another factor. The testable hypotheses of this study are that organizational social capital should increase the density of nonprofit organizations, and the influence of the relationship between OSC and the NP density should be more extensive in a smaller government presence. These hypotheses are tested constructing a social-capital index for the years 2000 and 2010. First, membership organizations create an environment for people to engage in social interactions which help to build unity, social trust, and social capital. Organizational social capital generated through a medium of membership organizations positively impacts the density of NP. This result is consistent with the first hypothesis. Second, jurisdictions with unsatisfied demands for public services create higher needs for nonprofit services. As such, organizational social capital profoundly impacts the NP density in a jurisdiction with a lower government presence. This result is also consistent with the second hypothesis.

The contribution of this study is two-fold. First, it shows that the membership organization can influence the growth (density) of the nonprofit organizations, not just the members. Second, this study suggests that the degree of government presence in a jurisdiction is an essential determinant in the relationship between organizational social capital and NP density.

Note

1. Later in a sensitivity test, this research replicates analysis using the interpolated values of OSC for years 2000 and 2010. Main results are consistent with the interpolated values.