Public and Private Funding Reliance of Nonprofit Organizations:
Implications for Interorganizational Collaboration

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Interorganizational Collaboration and Responsiveness to Financial Stakeholders

Issues of accountability and responsiveness to funders are pressing concerns for nonprofit organizations that take on even greater importance when nonprofits work in collaboration with other organizations. Extant research has linked reliance on governmental versus private funding sources to the internal governance structures, and management practices of nonprofit organizations (Smith and Lipsky, 1993, Saidel and Harlan, 1998, Guo and Acar, 2005, Horne et. al., 2005). However much less is understood about how reliance on public versus private funding influences the external relationships of nonprofits, particularly their participation in service collaborations.

Interorganizational collaboration has become widely acknowledged as a strategic organizational choice (Saidel and Harlen, 1998, Stone, 2000, Austin, 2000, Guo and Acar, 2005). The popularity of partnerships, alliances, formal collaborations, and other interorganizational collaborations is well documented (Feiock and Andrew 2006). In fact, after years of neglect, the field of public administration has been hit with a wave of research on interorganizational networks and intersectoral collaborations that promises to enhance our understanding of government and governance (cf. O’Leary 2007).

Nevertheless, important practical and theoretical questions regarding how collaboration is influenced by reliance on public or private funding have not been adequately addressed in this literature. To what extent do choices to enter into partnerships and collaborative relationships reflect strategic responses to satisfy the expectation and demands of the organization’s financial stakeholders? One reason this question has been neglected may be that it implies that collaboration is sometimes forced upon organizations or exogenously induced rather than being the result of voluntary
pursuit of innovative ways to more efficiently serve the community. Theories of civic governance assume the collaborative efforts of nonprofits can provide a decentralized system of governance in metropolitan areas through their voluntary collaborations (Oakerson 1999; 2004). Much of the literature on service collaboration has an advocacy tone (Berry et al 2005; McGuire 2006).

We argue that the ability and inclination of nonprofit organizations to engage in collaborative service arrangements will depend on organizational incentives shaped by their financial stakeholders. Collaboration has potential advantages over unilateral action and can improve efficiency and service quality, but it also imposes costs on nonprofit organizations and their managers. The benefits of collaborations are collective, but the costs are borne by individual participants, thus collective action problems are an issue. Reliance on private funding can lead to a focus on the narrow and specialized mission of the organization, and thus reinforces collective action barriers to working with other organizations. We anticipate that nonprofit organizations that rely primarily on private funding will avoid the costs of collaboration and thus be less likely to engage in service collaborations.

The benefits of collaboration will only offset these costs if there is strong external support for collaboration from funders. Public agencies often encourage or require service providers to participate in interorganizational service collaborations to yield “the benefits of increased efficiency and innovation, local adaptation, increased flexibility and enhanced community ties” (Graddy and Chen, 2006, 2). Public service organizations are better positioned to capture the collective benefits of collaboration, thus
interorganizational collaboration for public service delivery may be more likely for organizations highly dependent on government funding.

In the following sections of the paper, we identify the roles and responsibilities of nonprofit organizations in providing public services and then review the literature on how their funding sources influence the internal structure and operation of nonprofit organizations. We extend these ideas to service collaborations in order to investigate how reliance on governmental or private funding creates incentives or disincentives for collaboration. Based on data derived from a national survey of nonprofit organizations, we statistically estimate the effect of reliance on public and private funding sources for the organizational choice to engage in interagency service collaboration. Consistent with our expectations, we find that reliance on private funding through dues and donations reduces the likelihood of collaboration. In conclusion, we discuss the implications that nonprofit organizations’ reliance on private funding has for collective action, public services and governance.

**Nonprofits and Public service Provision**

The role of nonprofit organizations in delivering critical services within metropolitan areas has grown significantly over the past three decades in United States. The unique features of nonprofit organizations as non-coercive and non-distributive entities allow nonprofits to deliver important social services neither government nor the market is able to match (Kettl, 1988, Salamon and Lund, 1989, Weisbrod, 1998, Frumkin, 2002, Smith and Lipsky, 1993, Salamon, 2003).

Nonprofit organizations are: 1) private (i.e. independent of government; 2) self-governing; 3) nondistributive of profit; 4) voluntary and; 5) for the public benefit
This structure blurs the clear lines of ownership and accountability and it makes unclear who should be regarded as their stakeholders (Miller, 2002, Ostrower and Stone, 2005). “Non-distribution of profit” is considered the hallmark of the United States nonprofit sector. Most nonprofit organizations are governed by a board of directors who do not expect to financially benefit and are prohibited from doing so.

Jones (1995) classifies the stakeholders of nonprofit organizations as inside and outside groups. Those who work in a nonprofit organization are categorized as its inside stakeholders because they have a direct interest in organizational resources. Clients, suppliers, local governments, donors, and the general public with an interest in the actions of the nonprofit organization are its outside stakeholders services. The incentives of inside stakeholders to satisfy the interests of particular outside stakeholders varies considerably. We argue that a nonprofit’s response to its stakeholders reflects strategic choices to satisfy the demands and expectations of funding sources and secure future resources. Donors and inside stakeholders do not have clear ownerships over the outcomes of nonprofits activities, but organizational choices are affected by their expectations because uncertainties in the future funding opportunities are related to nonprofits’ survival and success.

**Financial Stakeholders and Internal Structure and Operation**

Nonprofit organizations serve various groups in society and rely on multiple sources of funds: individual/private donations, membership fees and client fees, private foundations, corporations, and government grants and contracts. Each of these stakeholders has their own expectations, claims on nonprofit organizations. Nonprofits that depend heavily on commercial income like client fees and charges are thus in a
vastly different position than those nonprofits which are financed largely by governmental funding (Salamon, 1999). A funding environment driven by private donations, dues, and service fees may lead nonprofit organizations to act as profit seekers (Sloan, 1998, Salamon, 1999). Often nonprofits serve socially disadvantaged community populations via government grants and contracts and they do not have the same access to private resources. Increased government funding may decrease or “crowd out” private giving, yet the assumption that private donors are knowledgeable of government funding is only weakly supported (Horne et al., 2005).

Grants and contracts are important forms of public support for many nonprofits. Indirect subsidies (e.g., tax exemption, tax forgone on corporate activities and tax credits) comprise a substantial portion of total revenues, but because they are not frequently attributed to the government (Rushton and Brooks, 2007), we consider grants and contracts as the major public funding sources for nonprofits.

Significant increases in the service functions of nonprofits have been fueled by government funding. Peter Frumkin (2002) reports that nonprofit organizations depend on government grants or contracts for over half of their revenue regardless of their altruistic, religious or political origins. Many nonprofit organizations struggle to attract and retain government funding since it is potentially the most reliable financial resource for nonprofits (Frumkin, 2002; Boris, 1999; Smith and Lipsky, 1993). Nonprofit dependence on government funds varies by subsectors of nonprofit economy. Government funding accounts for 66 percent of the revenues of health related nonprofits and 52 percent of revenues of social welfare organizations (Rushton and Brooks, 2007).
For local governments, outsourcing to nonprofits is justified by their professional capacity, specialized knowledge, and ability to tailor programs to specific communities and conditions (Smith and Lipsky, 1993; Jang 2006). When governments recognize emergent social problems, it is difficult to create new programs with government employees in a short time period. Nonprofit contracting permits local governments to acquire special expertise and talents for which there is flexibility to change or adapt programs and budgets. Even when private social service providers do not exist in large numbers, cities have charitable or religious organizations that already provide the services governments seek.

Government funding is central to many nonprofits, but the implications of their dependency on government funding has been subject to contentious debate within the literature (Smith and Lipsky, 1993, Frumkin 2002, Rushton and Brooks, 2007). Concern is sometimes expressed that government funding detracts from nonprofit agencies’ distinctive niche within the service system, creates inappropriate accountability relationships, and results in loss of professional autonomy. In particular, financial dependence on government grants and contracts may undermine flexibility in specialized programming, because it rarely come without mandates and strings attached (Frumkin, 2002, Rushton and Brooks, 2007). Government funding also creates management difficulties and uncertainties for nonprofit organizations that are required to work under contract rules and regulations which restrict nonprofits’ own specialties as an independent organization. In some instances these management constraints more than offset production costs differences between the nonprofit and private sectors.
Financial Stakeholders and External Relations

Service collaboration can compensate for the limited ability of a single organization to provide complex and dynamic services. Collaboration allows nonprofits to share risks associated with continuation of future funding. Thus, nonprofits engage both formal and informal collaborations with public, private, and (or) other nonprofit organizations in their community to strategically serve their client groups or the general public.

Current research provides extensive descriptions of the diversity of nonprofit collaborations. These include formal and informal alliances, joint ventures, partnership and service provision networks (Agranoff and McGuire, 1998; Bernstein. 1991; Provan and Milward, 1995; Bardach, 1996 Austin, 2000). To date, there has not been a systematic investigation of how participation in service collaborations are influenced by dependencies on public and private funding from external stakeholders.

Benefits and Costs of Collaboration

Collaboration can create new opportunities to serve clients. The potential gains from interorganizational cooperation include economic efficiencies, more effective response to shared problems, improvements in the quality of services delivered to clients, the spreading of risks, and increased access to resources (Gazley, 2006).

Collaboration with governments, other nonprofit or private organizations is an attractive option when nonprofits face transaction cost incurred from uncertainty in service demands, client needs and funding (Jang, 2006). Service collaboration also allows nonprofits to maximize service benefits through sharing the potential risks associated with service production and delivery.
Collaboration also imposes costs on organizations and their managers. Several scholars note potential drawbacks or costs of collaboration (Gazley and Brudney 2007, McGuire 2006). These include loss of managerial autonomy, cooptation of actors and goals, financial instability, difficulty in evaluating organizational results, and the opportunity costs from the time and resources devoted to collaborative activities.

The benefits of collaboration tend to be collective in nature; they are shared by all of the collaborating organizations and their clients who are service recipients. On the other hand, the costs of collaboration tend to be selective. They are costs to the individual organizations that participate in collaborative efforts. Nonprofits are thus confronted with a collective action problem because the benefits of collaborative services are diffused and difficult to measure for individual organizations, but many of the costs are borne by individual organizations and their managers.

Private funding reinforces the individual organizational focus and thus the costs of collaboration will outweigh the benefits. On the other hand, public funders may seek to structure organizational incentives in a manner that allows nonprofits to overcome the collective action barriers to collaboration. Gazley argues that public sector actors are more receptive to collaboration “because they have a greater need for the resources that partnership can bring” (2007:7).

**Government Funding, Resource Dependence and Collaboration**

The structural context of government funding encourages human and social service nonprofit organizations to participate in mandated and voluntary cooperation with public and community human service organizations. Participation in the development of broad interorganizational collaboration can sometimes be a condition of funding (Bailey
Provan and Milward’s (1995) national study of mental health service provision networks demonstrates that participation in a “service implementation network” is embedded in the structural context for receiving external funding for service provision.

Government agencies often prefer to work with coalitions or networks of providers because the coalition facilitates managing service provision as a system. Coalitions of multiple organizations make it easy to negotiate with a single group rather than a set of individual organizations (Graddy and Chen, 2005). More importantly, government can deter the organization from reneging on collective commitments through group based monitoring. Milward (1994) argues that governments promote common norms and encourage service provider coalitions because they prefer to deal with a set of collaborative organizations together to resolve joint problems rather than negotiate with each provider individually. “Not only is this more efficient, it is also a way to make sure that any deals arrived at can be enforced by the coalition” (1994: 74).

The need for public funders to promote collaboration can be viewed through the lens of resource dependence theory. Resource dependence theory seeks to explain interorganizational relationships through the exchange of critical resources and power imbalances. Organizations are not able to produce all of the resources they need and thus interact with other organizations that control needed resources. There are greater dependencies between nonprofits and public organizations than between nonprofits and their sources of private revenues. Describing mutual dependent relationships of government and nonprofits, Graddy and Chen (2006:536) maintain that “public
organizations depend upon social service organizations for their service delivery capacity, and providers depend on public organizations for clients and revenue.”

Susan Bernstein (1991) addresses the reciprocal nature of relationships between nonprofit service providers and governments through interviews with managers from seventeen nonprofit social service agencies in New York City. She reports that nonprofit vendors create coalitions for building organized power to influence government contract decisions.

While public sector funding creates incentives for collaboration that offset their organizational costs, reliance on private revenues may narrow the responsibilities of nonprofit organizations and constrain collaborative options. Based on the discussions above, we advance two propositions regarding how financial dependencies influence nonprofit collaboration.

**Proposition 1.** Dependence on governmental funding will increase the likelihood that nonprofits will engage in interorganization collaboration.

**Proposition 2.** Dependence on private funding will decrease the likelihood that nonprofits will engage in interorganization collaboration.

**Additional Factors Influencing the Advantage of Collaboration**

We also need to account for factors influencing the costs and benefits of collaboration for nonprofits in order to compare relationships between financial support from government funds and private revenues on the likelihood that an organization will collaborate in service delivery. These include competition among service providers, service demands, characteristics of target populations, and organization characteristics.
We expect the choice of collaboration to be positively related to the level of competition in the nonprofit service area. While competition may encourage unilateral action, it also creates strong incentives to pursue the potential efficiency gains and service quality advantages of collaborative arrangements. If competition makes it easy to switch vendors to find cheaper or more cost efficient service delivery, nonprofits may seek to minimize risk through collaborative partnerships (Austin, 2000). A lack of market competition, especially in production of social services, requires government to pay attention to the service cost implications of sector choices (Kettl, 1993, Donahue, 1989). A non-competitive market offers limited economic benefits. Furthermore, lack of market discipline erodes the accountability of public provision because government monopolistic behavior transfers to the external agency without sufficient competition for winning government contracts and grants. Accordingly when private markets are weak, nonprofit-government partnerships are demanded. Thus partnership arrangements between nonprofits and government are the preferred service provision arrangement for providing social services which do not attract private providers.

Service demands can also be linked to collaboration. Increased primary service demands create uncertainty for nonprofits that can lead them to adopt collaboration strategies to better manage their workloads (Baum and Singh, 1996). Thus organizational stress due to increased service demands is expected to be positively related to nonprofit participation in external collaborations.

The target population types served by nonprofits are also expected to influence decisions to collaborate because the types of clients served can be linked to information cost in service delivery. Heterogeneity in the demographic composition of service
recipients is the attribute given the most attention in the literature. *Universalistic* service provision driven by concerns for equity and fairness may require governments to standardize their services to clients. Service needs not adequately addressed by this approach, often lead to efforts by nonprofits to address *particular* community problems (Lipsky and Smith 1989-1990). Heterogeneous communities with more diverse citizen preferences have greater needs for nonprofit organizations. Dealing with diversity is a problem of information and it presents provision difficulties that can be overcome by participating in service collaborations that result in better access to resources and information on their target populations for service (Weisbrod 1988, 1997). Nonprofit organizations that serve low socio-economic status clients may become involved in collaboration because a single organization is unable to adequately differentiate services in response to disadvantaged groups in the community. The information costs of nonprofits are minimized by obtaining experiences and knowledge through interorganizational relationships within formal collaborations.

Certain internal organizational characteristics may also predispose a nonprofit organization to collaborate with other organizations. We expect decisions to participate in collaborative relationship with other organizations will vary with organizational size, revenue, and number of personnel because they represent the resources and financial strength of nonprofit organizations. On the one hand, bigger and more well off nonprofits may have greater scope for interorganizational relationships due to their wider range of primary services they can provide. On the other hand, revenue size and human resources are indicators of independence of the nonprofit organization which may diminish the
need for collaborative incentives because they are already well equipped to provide services on their own.

**Data and method**

Our empirical analyses examine formal collaboration decisions of nonprofit organizations in twelve metropolitan areas in the United States. The primary focus of this investigation is the impact of funding dependency on collaboration based on responses to a survey of nonprofit organizations in the twelve metro areas. The theoretical framework predicts that nonprofit organizations’ decision to participate in service collaborations is a function of dependencies on public and private funding as well as attributes of organization and the environment in which it operates. The dependent variable is a binary indicator of whether or not a nonprofit organization participated in any service collaborations through formal agreements or contracts as reported in the survey. Probit maximum likelihood techniques are used to estimate the likelihood of collaboration.

The data examined here are taken from the national survey study Community Relationships of Nonprofit Organizations (CRNO). No other nonprofit survey explores nonprofits service management issues, institutional arrangements and relationships with local government in such detail. This survey is based on mail questionnaires sent to 1512 nonprofit organizations in selected service areas. The twelve metropolitan statistical areas (MSAs) were selected from the 56 MSAs with an estimated 1999 population of at least 1 million. A purposive sample was employed to ensure diversity in terms of regions, the economic growth of the metropolitan areas and the diversity of major local governments. The sample metropolitan areas are Boston, Buffalo, Milwaukee, Cleveland,
Denver, Salt Lake City, San Francisco-San Jose-Oakland, Riverside-San Bernardino, San Antonio, Houston, Tampa-St. Petersburg, Miami-Ft. Lauderdale. Although low, the response rate of 18 percent on the survey is not at all untypical for surveys of nonprofit organization (Hager et. al. 2003).

The National Center for Charitable Statistics (NCCS) core data file provides information on all nonprofit organizations registered with the IRS as 501(C)(3) public charities. This listing excludes most churches and advocacy nonprofits generally registered as tax-exempt entities with the IRS under Section 501(C)(4) of the Internal Revenue Code. The selection of service areas is based on the services that are most often contracted based on International City/County Management Association (ICMA) Alternative Service Delivery studies. The ICMA surveys reveal that nonprofit contracting is mostly found in the human and social service areas and cultural and art service areas. We then surveyed nonprofits in each metro corresponding to the National Taxonomy of Exempt Entities (NTEE) codes that match the service areas from the ICMA studies.

Before turning to the analysis of funding modes and their organizational consequences, it is important to identify the ranges of collaboration in each of nonprofit service areas. To what extent do nonprofit organizations collaborate with external organizations and how do the characteristics of their services relate with their choice of collaboration? Table 1 provides collaboration rates for each nonprofit category based on responses to the question “does your organization have formal collaboration efforts with other public, private and /or nonprofit organizations in your community (i.e. formal arrangements for coordinating legal, fiscal, administrative or programmatic activities
with other organizations)?” on the CRNO survey. More than half (55 percent) of our sample nonprofits report they engage in formal service collaboration with other organizations in last five years. The percentage engaging in service collaboration varies by service area from 26 percent to 87 percent. Homeless shelters report the highest rate of collaboration.

Responses to this survey question on collaboration efforts with other public, private and/or nonprofit organizations is the dependent variable in the next stage of the analysis. This measure captures nonprofit organization’s decision to participate in formal collaborative agreements. The collaboration decision is operationalized as a binary variable scored 1, if the nonprofit reported participation in any formal collaboration, otherwise 0.

Table 1 here

**Independent Variables**

We hypothesize that participation in the interorganizational service collaboration is a function its funding sources, service competition, service demands, characteristics of target population, and the size of its revenue and personnel. The anticipated relationships are summarized below in Table 2.

Table 2 here

*Funding sources.* Our primary explanatory variables are the characteristics of funding sources of nonprofit organizations. The survey asks a set of questions regarding how the organization is funded. The answers to these questions are used to construct indicators of reliance based on the percentage of each funding categories of 1)
government; 2) foundation support; 3) individual and private donations; 4) membership fees; 5) client fees; and 6) other sources.¹ For the probit analysis, we have five continuous variables indicating the actual percentages of funding from the first five sources.

*Competition.* This survey variable indicates “the extent to which nonprofit organizations compete with other organizations in delivering services.” It is measured on a five point ordinal scale from strongly agree (1) to strongly disagree (5).

*Increased service demands.* This variable indicates the extent to which nonprofit organizations experienced change in demands for their primary services over the last five years. It is measured on a five point ordinal scale from greatly decreased (1) to greatly increased (5).

*Characteristics of target population.* This variable indicates the extent to which the clients the organization serves are socio-economically disadvantaged on a five-point ordinal scale from strongly agree (1) to strongly disagree (5).

*Organizational characteristics.* We include measures of two organizational factors. One is total revenue and the other is the actual number of full-time equivalent personnel of professionals, administrative, volunteers in staff positions, and volunteers in other roles.

**Findings**

Table 3 reports binary probit model estimates for how funding sources and organizational factors influence the likelihood that nonprofit organizations will

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¹. Since some membership nonprofits derive their income from members and also rely on donations, grants, and commercial fees, we test for multicollinearity among all five funding sources in our model. We found no evidence of multicollinearity problems. It is sometimes unclear what constitutes membership fees because members provide fees in various ways, however, nonprofit leaders have a clear idea in their sources of income because commercial client fees have long been an important and distinctive component of financial source of nonprofit organizations (Steinberg, 2007, James and Young, 2007).
participate in interorganizational service collaborations. The probit parameter estimates indicate that the characteristics of nonprofit’s funding sources have significant impact on their collaboration choices. Although not statistically significant in every instance, the directions of the effects of each funding source variable support the expectations of the model. Private donations and membership dues reduce the likelihood of collaboration. Also, increases service demands significantly predicts interorganizational collaboration.

Table 3 reveals that revenues from private income sources are negatively related to nonprofits’ interorganizational collaboration. Private funding leads nonprofits to provide services independently rather than through collaboration. Private support allows nonprofits to operate autonomously in service delivery and avoid the individual costs of engaging in collaboration. Reliance on both donations and membership dues significantly reduce the likelihood of collaboration.

While public funding may at least partially offset the organizational costs of collaboration, the influence of government funding on collaboration did not achieve statistical significance. It should be noted that government grants or contracts sometimes lead nonprofits to be dependent upon directions of government mandates and political policy maker’s preference for service production and service delivery (Smith and Lipsky, 1993, Salamon, 1995, Frumkin, 2002). Rushton and Books (2007) argue that the nonprofit leaders must ask whether the benefits from public funding exceed the costs resulting from mandates and misalignment with the nonprofit’s guiding mission. Also government grants produce donative income while government contracts produce service fees. The current analysis is unable to differentiate between these two types of governmental funding. Doing so may provide additional insights. Thus, the association
between government funding and interorganizational collaboration deserves further attention.

As we hypothesized, increases in current service demands are positively associated with interorganizational collaboration. Organizational factors such as total revenue and number of personnel do not make a significant contribution to a nonprofit’s decision to create or participate in interorganizational collaboration when other factors are held constant. However, the signs of coefficients for each organization factor are positive. Grønbjerg (1993) suggests a statistical caveat. Insignificant relationships between organizational factors and collaboration may result because revenue and personnel are possibly working as intermediate factors associated with nonprofit’s funding structures and then significantly associated with collaboration (Park and Ungson, 1997, Guo, 2006, Toepler, 2004).

In general, the probit model of nonprofit collaboration reveals that nonprofits mainly supported by private funding sources are less likely to collaborate than publicly funded nonprofits.

**Discussion**

We explain nonprofit organizations’ choice of collaboration as a response to the costs and benefits of interorganizational collaboration. Our empirical analysis reveals that nonprofits funded by private income sources are less likely to collaborate. The negative influence of private funding on collaborations may be linked back to the earlier described distinction between internal and external stakeholders (Jones, 1995). Internal stakeholders may define mission more narrowly and thus see collaboration as diverting resources from organizational priorities.
Among external stakeholders, governments function promote a broader public interest agenda. The impact of nonprofits’ financial dependency on government funding has been controversial within the nonprofit and public administration literatures. Our results indicate that the government funding does not predetermine collaboration or mandate nonprofits’ participation in collaboration. However, it is premature to dismiss the possibility that public funding promotes collaboration until grant and contract revenues are separately examined.

The incentives for collaborative agreements are stronger for governments than nonprofits. Because the benefits are system-wide, but the costs are often borne by individual organizations, nonprofits face a collective action problem. When they rely on private support, the costs of service collaboration can outweigh their individual benefit from collaboration. Thus these nonprofits are less likely to participate in collaborative service arrangements. Unlike individual nonprofits, governments may be able to capture the collective system-wide benefits of collaboration and thus have an interest in helping nonprofits overcome the barriers to collaborative service delivery. In this analysis, the incentives created by public funding alone were not adequate to offset these costs of collaboration. This suggests that in order to capture the system wide benefits of cooperative service networks, governments may need to provide stronger incentives or mandate collaboration.

These results also have implications for regional governance and public services in metropolitan areas. Proponents of civic society such as Oakerson (1999) argue for governance systems in metropolitan areas in which nonprofits play a key role as providers of community services both independently and in collaboration with
governments and other nonprofits. The finding that nonprofits that rely on private funding are less likely to engage in collaborative service arrangements suggests the incentive structures faced by nonprofits can limit the services provided and populations served. Thus over reliance on private support may narrow the service focus of nonprofits, discourage collaboration, and leave gaps in metropolitan governance.

While there may not be a single dominant theoretical explanation for collaboration, the finding that reliance on private funding reduces collaboration provides an important piece to the puzzle. Bernstein (1991) suggests nonprofit organizations strategically engage in collaborations to build organizational influence. Additionally, government agencies prefer to deal with the service provision system as a whole (Provan and Milward, 1995). These are important pieces to the collaboration puzzle as well.

By building on nonprofit management collective action theories, future work can allow us to more systematically examine how dependency by nonprofit organizations on governmental funding influences their likelihood of engagement in interorganization collaboration.
References


Jones G. R. 1995. Organizational theory: text and cases. Addison-Wesley, Reading: Massachusetts


Table 1 Categories of Nonprofit Service Organizations

<table>
<thead>
<tr>
<th>NTEE code</th>
<th>NTEE Major Field²</th>
<th>Collaboration Rate</th>
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<td></td>
<td></td>
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<td>A20, A50</td>
<td>Arts, Cultural organizations</td>
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<td>Libraries</td>
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<td>D20, D60</td>
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<td>Alcohol, Drug abuse prevention programs</td>
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<td>J20</td>
<td>Employment procurement assistance, Job training</td>
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<td>L41</td>
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<td>Senior centers</td>
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<td>Homeless centers and services</td>
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Table 2. Nonprofit Collaboration Model with Predicted Coefficient

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<th>Dependent Variable</th>
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<td>Funding sources</td>
<td>Government (+)</td>
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<td></td>
<td>Foundation (+/-)</td>
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<tr>
<td></td>
<td>Private donations (-)</td>
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<td></td>
<td>Membership dues (-)</td>
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<tr>
<td></td>
<td>Client fees (-)</td>
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<tr>
<td>Control variables</td>
<td>Competition (+)</td>
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<tr>
<td></td>
<td>Service demand (+)</td>
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<tr>
<td></td>
<td>Target population (+)</td>
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<td></td>
<td>Revenue (+/-)</td>
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<tr>
<td></td>
<td>Personnel (+/-)</td>
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Table 3. Probit analysis for nonprofit organizations’ collaboration

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<th>COLLABORATION</th>
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<tr>
<td>Government (+)</td>
<td>0.0018</td>
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<td>Foundation (+/-)</td>
<td>0.0047</td>
<td>0.63</td>
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<tr>
<td>Private donations (-)</td>
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<td>Membership dues (-)</td>
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<td>-1.70</td>
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<tr>
<td>Client fees (-)</td>
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<td>Competition (+)</td>
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<td>-1.50</td>
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<td>Service demand (+)</td>
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<td>Target population (+)</td>
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<tr>
<td>Revenue (+/-)</td>
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*p<.05