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# **Benefits-based Revenue Streams and Financial Health: The Case of Arts and Cultural Nonprofits**

## **Abstract**

A large number of empirical studies have discussed the revenue diversification strategy for nonprofits, but little attention has been paid to the components of revenue portfolios, even though each revenue source flows into a nonprofit with its own characteristics. Drawing on Young's (2007) benefits theory, this study tests the proposition that a nonprofit would be stronger financially if its income portfolio reflected the mix of benefits it provides. We find evidence that the benefits-based revenue strategy is associated with better financial outcomes using the dataset from DataArts (2008-2016). Yet, this relationship is not linear, and the positive relationship is seen only when the share of benefits-based revenues is above a certain threshold. A detailed examination reveals that the benefits-based revenue strategy should be employed judiciously, depending on each organization's own capacity. We discuss the ways nonprofits can employ benefits-based financing while diversifying revenue streams.

Keywords: benefits theory, benefits-based, revenue diversification, nonprofit fiscal health

A large volume of literature stresses the importance of securing and maintaining various revenue streams for a nonprofit's financial health (Carroll & Stater, 2009; Chang & Tuckman, 1994; Greenlee & Trussel, 2000; Hager, 2001; Keating, Fischer, Gordon, & Greenlee, 2005; Trussel, 2002; Tuckman & Chang, 1991). Nonprofit revenue sources include, but are not limited to, government funding, charitable giving, fee-for-service, corporate sponsorships, foundation grants, special events, and in-kind donations. Since each type of funding source comes with its own characteristics and expectations for recipient nonprofits (Kingma, 1997; Young, 2007), managing diverse revenue streams provides both valuable opportunities and distinct challenges for nonprofits and demands nonprofit leaders to understand the nature of each type of revenue.

Yet, despite the vast amount of literature concerning the need for diversifying revenue streams, little is known about how the composition of diversified revenue streams influences a nonprofit's financial health. Our paper discusses *how* nonprofits should diversify their revenue streams by adopting Dennis Young's benefits theory of nonprofit finance (2007, 2017). Benefits theory argues that a nonprofit's sources of income should correspond to the nature of the organization's services given that each nonprofit offers its unique goods and services that appeal to specific constituents. According to Young (2007), pursuing benefits-based revenue streams can help organizations fully capitalize on all potential income sources, which can be achieved by carefully identifying beneficiaries who are likely to pay for the benefits provided. In this approach, beneficiaries include not only those direct recipients of program services but also others who share the organization's mission and thus indirectly benefit from its programs.

A limited number of studies have adopted the theory to describe the way nonprofits are financing their programs (Fischer, Wilsker, & Young, 2011; Kim, Pandey, & Pandey, 2017; Wilsker & Young, 2010), but no study known to us has attempted to empirically test the idea in

benefits theory. In other words, there has been little attempt made to test whether creating an income portfolio to be reflective of a nonprofit's benefits and beneficiaries makes a nonprofit financially stronger.

Our study intends to fill this gap in the literature by testing the idea behind benefits theory, that is, nonprofits are more financially secure if they connect their programs and services to a source of income that would directly or indirectly benefit from the programs. We use the DataArts' dataset from 2008-2016 to test the positive relationship between benefits-based revenue portfolios and the financial health of nonprofit organizations.

## **Literature Review**

### *Benefits Theory*

Benefits theory (Young, 2007, 2017) suggests that nonprofits can achieve a competitive advantage by connecting their mission with financing strategy. Simply put, the theory suggests that the unique mix of benefits offered by nonprofits becomes the mechanism with which nonprofits can achieve a sustainable competitive advantage to reach out to potential payers of those benefits. In this transactional relationship, those benefits conferred to the payers include not only tangible benefits like receiving direct services but also intangible benefits such as sharing the mission of a nonprofit or taking advantage of the positive image associated with a nonprofit. These payers can take the form of consumers, donors, or institutional partners. As such, linking the mix of mission-driven benefits to their financing strategy can help nonprofits with “how to” design their diverse revenue streams.

Young's (2007, 2017) benefits theory divides nonprofit goods and services into four types: programs that mainly confer public, group, private, or trade benefits. First, some nonprofit programs benefit the general public at large, such as knowledge generated by research institutes that can help the whole society. For these nonprofits, benefits theory argues that government agencies would be the most appropriate funding sources because of their interest in providing public goods.

Second, group benefits "accrue to an identifiable subgroup of society and are valued by donors interested in helping that group" (Young, 2007, p. 345). For instance, foundations benefit from funding an organization's activities that address the causes to which they are dedicated. Even though foundations do not receive quid quo pro benefits, supporting nonprofit activities help the foundation to achieve their missions. Another example of a group beneficiary is a group of art lovers who enjoy exhibitions. Benefits theory suggests that these art lovers are more likely to respond to fundraising appeals to support art museums.

Third, certain nonprofit programs provide benefits directly to individuals, such as patients visiting health clinics or concert-goers enjoying symphony orchestras. According to benefits theory, fee-for-service would be the most appropriate source of revenue to the extent that the individual is capable of paying. Not all programs that create private benefits can be paid through a fee-for-service scheme. Examples are job training programs or homeless shelters. Given their spillover effects for the public, government and philanthropic support may be the most appropriate sources of income to provide such "redistributive goods" that are "considered essential to, but hard to afford by, low-income consumers" (Young, 2017, p. 70).

Lastly, trade benefits occur for institutions that are partnered with nonprofit organizations. Nonprofit partnerships with other entities, including businesses, government

agencies, or other nonprofits, entail mutual, quid pro quo benefits and provide both parties with professional advantages. For example, an association of K-12 teachers can pay an education nonprofit to facilitate professional development workshops. The association benefits by producing better-trained educators, while the nonprofit benefits from having more teachers who can implement its methods in the classroom.

It must be noted that an organization can offer more than one type of benefit, and each nonprofit produces a unique set of benefits. For instance, an organization could mainly confer private benefits while also generating some public and group benefits. Another organization's programs could primarily offer public benefits with some private benefits on the sideline. Taken all together, benefits theory urges nonprofit managers to carefully identify direct and indirect beneficiaries who appreciate the value their nonprofits create. Then, nonprofit leaders should cultivate relationships with those direct and indirect beneficiaries to secure sufficient and predictable resources. Nonprofit organizations must determine how much funding can be expected from a given source, after subtracting so-called "transaction costs" such as staff time and financial resources required to cultivate that particular source. Young (2017) argues that pursuing benefits-based revenue streams can reduce transaction costs because soliciting funds from direct and indirect beneficiaries can yield more support than seeking funding opportunities elsewhere.

The core idea of benefits theory can be summarized into four working principles. First and foremost, "sources of income should correspond with the nature of benefits conferred on, or of interest to, the providers of those resources" (Young, 2007, p. 341). Second, different types of income are suited to support different kinds of programs and services. For instance, government funding would be the most appropriate revenue base for a nonprofit organization that serves

programs broadly relevant and accessible to all community members. If the mission is to preserve the cultural heritage of an ethnic group, individual donations and institutional grants are more suitable. Third, the mix of a nonprofit's income portfolio should mirror the mix of benefits its goods, services, or programs provide. Finally, the theory recognizes that there are restraining factors for a nonprofit's pursuit of a benefits-based financing strategy, such as economic feasibility and administrative capacity.

### *Revenue Diversification*

The nonprofit finance literature primarily focuses on revenue diversification in which potential risks are spread out across funding sources (Chang & Tuckman, 1994; Frumkin & Keating, 2011; Pfeffer & Salancik, 1978). In plain language, the strategy calls for putting the nonprofit's proverbial eggs into many different baskets. Over the years, a large number of empirical studies have linked revenue diversification to various indicators of a nonprofit's financial stability (Carroll & Stater, 2009; Greenlee & Trussel, 2000; Kim, 2016; Hager, 2001; Trussel & Greenlee, 2004; Tuckman & Chang, 1991). For instance, Carroll and Stater (2009) found that diversifying revenue streams reduces the differences between actual and expected revenues over time, and Hager (2001) demonstrated that concentrated revenue streams increase the likelihood of a nonprofit arts organization's demise. However, pursuing a revenue diversification strategy can be burdensome, especially for smaller organizations, because of the complexity of acquiring and managing multiple funding streams (Froelich, 1999; Frumkin & Keating, 2011; Weisbrod, 1998). Diversification may even harm organizations when resource providers impose conflicting demands on recipient nonprofits (Froelich, 1999; Hager & Searing, 2014).

Recent studies (Chikoto & Neely, 2014; Kim, 2016; Mayer, Wang, Egginton, & Flint, 2014; Shea & Wang, 2016) suggest the need for a more nuanced approach to revenue diversification. For instance, some studies found merit in concentrating only on a few revenue sources that nonprofit organizations are more familiar with rather than trying to diversify revenue streams. Chikoto and Neely (2014) suggested that nonprofits can grow their revenue by concentrating on fewer revenue streams, focusing on those in which they have expertise. Shea and Wang (2016) similarly argued that nonprofits must take into consideration the characteristics and appropriateness of various revenue streams, and nonprofits should not follow the revenue diversification strategy by default, because other factors such as size, fundraising expenses, and source of revenue can influence diversification. Together, these studies suggest that the key to achieving organizational financial health does not lie in how diversified revenue streams are but rather the way in which they are diversified. Each organization possesses its own unique mission that can appeal to different sources of revenue. As such, our study examines whether a nonprofit displays greater financial strength if its revenue streams are diversified based on the mix of its unique benefits.

It is important to note that the benefits-based financing strategy is compatible with the revenue diversification strategy as benefits theory urges nonprofits to expand sources of revenue “sequentially and incrementally” by assigning different priorities to various revenue items (Young, 2017, p. 235). The difference is that benefits theory encourages organizations to go beyond simply diversifying income sources by fully exploiting the beneficiaries that can support and pay for their programs and put under-utilized assets such as reputation to their best use (Young, 2017).



### *Empirical Studies Using Benefits Theory*

Thus far, only a handful of studies have adopted benefits theory. Wilsker and Young (2010) used survey responses from 87 Jewish Community Centers (JCCs) to identify the types of benefits different programs offered. Their empirical estimation showed that increases in expenses for activities with an emphasis on private benefits, such as fitness and recreational programs, lead to a greater reliance on earned income. In contrast, increases in expenses for activities emphasizing public benefits, such as cultural programs, are associated with an increased reliance on government funding and institutional contributions. Although the use of a survey allows the authors to gain more nuanced information about the types of benefits, Wilsker and Young's (2010) study is limited to just one type of organization, JCCs, with a relatively small sample size.

Fischer, Wilsker, and Young (2011) adopted a larger sample to make the results more generalizable and divided organizations into three types of benefits group using the National Taxonomy of Exempt Entities (NTEE) system. Their study concluded that the type of benefits conferred is indeed correlated with the organization's revenue portfolio. However, due to the limited information conveyed by the NTEE system, they could only categorize programs as either public or private, labeling many hard-to-identify programs as "mixed" type.

Focusing on arts and culture nonprofits, Kim, Pandey, and Pandey (2017) identified the relationship between the four types of resource providers (consumers, partners, donors, and taxpayers) and the four types of benefits that nonprofits create (private, trade, group, and public benefits), confirming that most nonprofits seem to already apply the benefits theory-oriented idea.

All these earlier studies provide some support that many organizations' income portfolios are already organized in the way benefits theory recommends; that is, nonprofit revenue

composition corresponds with the type of services and benefits produced. Nevertheless, none of these studies has tested whether or not having a benefits-based revenue strategy makes a difference in the financial strength of an organization. Our study intends to fill this gap in the literature and test the utility of benefits theory-oriented financing strategy. Drawing on a unique data set compiled by DataArts, our study tests whether a nonprofit shows greater strength on its fiscal health indicators if its primary revenue streams are matched with the type of benefits generated from its primary activities. Our study benefits from the DataArts' dataset that provides detailed financial and programmatic information about arts and cultural nonprofits. As such, we hypothesize that:

**Hypothesis 1:** Nonprofits that generate more revenue from benefits-based activities show stronger financial health than otherwise comparable organizations.

**Hypothesis 1-1:** Public benefits-oriented nonprofits (referred to hereafter as public nonprofits) that generate more revenue from public-type revenue sources (referred to hereafter as public revenue) show stronger financial health than otherwise comparable public nonprofits.

**Hypothesis 1-2:** Group benefits-oriented nonprofits (referred to hereafter as group nonprofits) that generate more revenue from group-type revenue sources (referred to hereafter as group revenue) show stronger financial health than otherwise comparable group nonprofits.

**Hypothesis 1-3:** Private benefits-oriented nonprofits (referred to hereafter as private nonprofits) that generate more revenue from private-type revenue sources (referred to hereafter as private revenue) show stronger financial health than otherwise comparable private nonprofits.

**Hypothesis 1-4:** Trade benefits-oriented nonprofits (referred to hereafter as trade nonprofits) that generate more revenue from trade-type revenue sources (referred to hereafter as trade revenue) show stronger financial health than otherwise comparable trade nonprofits.

It is worth reiterating that our study builds on the previous literature on nonprofit revenue diversification (e.g., Greenlee & Trussel, 2000; Tuckman & Chang, 1991). Benefits theory recommends expanding the revenue streams by prioritizing revenue types that are most appropriate for the kind of benefits these goods and services produce. Needless to say, nonprofits are likely to produce more than one type of benefits, and as such, they should not rely on only one type of revenue source. For example, universities provide predominately private benefits to students, but they also offer public benefits to society by providing educated citizens. Alumni who share the pride and reputation of their schools also receive group benefits. Benefits theory expects that the university's income strategy starts with paying adequate attention to its primary benefits-based income, tuition fees, while also seeking out government grants and alumni gifts. As such, we hypothesize that:

**Hypothesis 2:** Relying excessively on one type of revenue, even if benefits-based, could negatively influence the fiscal health of a nonprofit.

## **Data and Measurement**

### *Arts and Cultural Nonprofits*

The arts and cultural nonprofit sector covers heterogeneous groups in terms of the range of activities and benefits such organizations offer. McCarthy and his colleagues (2004) recognize that arts nonprofits bring about various benefits that affect both the public and private spheres.

Public benefits include stimulating local economies (Rushton, 2013) as well as facilitating civic engagement and community building (Kim & Mason, 2018). Private benefits include improving cognitive performance and physical health (Binder & Kotsopoulos, 2011). It should be noted that most arts and cultural activities that confer private benefits also create positive public effects such as improved learning capability and civic engagement (McCarthy et al., 2004).

The wide range of benefits that the arts and cultural sector provides allows the sector to receive financial support from various sources: 44% of the revenue comes from private donations, one third from fee-for-service, and nearly 20% from government grants and investment income (McKeever, Dietz, & Fyffe, 2016). Compared with other subsectors, the arts and culture sector has a relatively balanced yet diversified income structure, making it a preferred candidate to test our hypotheses. For instance, education nonprofits typically receive almost 60% of their total revenue from fees-for-services, and the overall revenue of health nonprofits comprises mostly fees-for-services and government funding such as Medicaid and Medicare (McKeever, et al., 2016).

### *DataArts*

This study uses data drawn from DataArts, a nonprofit organization initiated by a group of grant makers and arts advocates in 2004 (formerly the Cultural Data Project). It compiles programmatic and financial data on arts and culture nonprofits. The project began in Pennsylvania and gradually expanded to 13 states and the District of Columbia. As a means to incentivize participation, DataArts provides all participating nonprofits with automatically populated forms such as annual reports and balance sheets as well as fundraising, marketing, and

program reports. Also, DataArts has partnered with hundreds of foundations that ask recipient nonprofits to submit performance reports using the DataArts tools.

Our study takes advantage of the detailed financial information available in the DataArts' dataset. For example, it contains detailed information on sources of revenue, such as ticket sales, concessions revenue, and contributions made by individuals, corporations, and foundations. These disaggregated sources of income (full list available in Table 1) allow us to group them into different categories based on benefits theory. We estimate the relationship between benefits-based revenue and nonprofits' financial health using ordinary least squares regression with robust standard errors, as Breusch-Pagan test indicates the presence of heteroskedasticity. Using a rigorous data cleaning process, the original sample of 81,735 observations covering 17,756 individual arts nonprofits was pared down to 30,170 observations covering 6,890 organizations from 2008 to 2016 (see Appendix A).

### *Dependent Variables*

As this study explores the relationship between the use of a benefits-based financing strategy and a nonprofit's overall financial health, we adopt eight dependent variables. Our four main dependent variables measure an organization's solvency, profitability, liquidity, and margin to capture an organization's overall financial health for both long-term and short-term capacity based on Bowman (2011a) and Prentice (2016).

For long-term financial health, we measure solvency and profitability. Solvency, measured by the total net assets divided by total revenue, assesses a nonprofit's capacity to fulfill its long-term obligations (Tuckman & Chang, 1991; Weikart, Chen, & Sermier, 2012). A high solvency ratio indicates greater capacity to sustain a nonprofit's programs in a time of financial

distress (Bowman, 2011a; Tuckman & Chang, 1991). Profitability reflects an organization's long-term sustainability and is measured by the total net revenue divided by total assets (Bowman, 2011a). A nonprofit would benefit from a surplus because it protects against financial vulnerability (Calabrese, 2012) and ensures its longevity (Bowman, 2011a).

For short-term financial health, we measure liquidity and margin. Liquidity, measured by months of spending, represents an organization's short-term capacity, expressed as the number of months a nonprofit could maintain its current spending if all of its current revenues vanish (Bowman, 2011a). It is calculated as 12 times working capital divided by spending on operations in which working capital is the current assets minus the summation of current liabilities and temporarily restricted net assets, and spending on operations is the total expenses minus depreciation. Margin, which measures short-term sustainability, is "an organization's annual surplus expressed as a percentage of spending on operations" (Bowman, 2011b, p. 179). It is operationalized as the summation of change in unrestricted net assets and depreciation divided by total operating expenses. All four measures are winsorized at 1% to address outliers.

We measure four additional outcome variables to assess an organization's growth over time, given the idea that the benefits-based revenue strategy is expected to help nonprofit organizations better identify and exploit potential income sources to grow. First, NA3 and NA20 monitor the growth of net assets over time. NA3 measures the net assets change over a three-year period. NA20 is a dichotomous variable that is coded one if a nonprofit's net assets increased by at least 20% compared to two years ago, zero otherwise. A sharp decrease in net assets can be a warning sign of insolvency, which affects a nonprofit's ability to deliver services (Keating et al., 2005). NI measures profitability based on Ohlson's model (1980). It is a dichotomous variable that is one if a nonprofit's net income is positive during a three-year period, zero otherwise.

Finally, RC3 measures the revenue change over a three-year period. A positive value indicates revenue growth, while a negative value implies funding disruption (Keating et al., 2005).

### *Independent Variables*

To match the type of organizations with the appropriate revenue type, categorized based on benefits theory, we divided revenue streams into four types—public revenue, group revenue, private revenue, and trade revenue. Each revenue variable represents the percentage of one type of benefits-based revenue out of total revenue.

Because government has the incentive to address the needs of the public at large, government agencies are usually interested in funding programs that benefit the general public. As such, *Public Revenue* includes funding from local (city and county), state, and federal governments. *Group Revenue* includes membership dues; individual and board of trustee support; corporate, foundation, and parent organization support; special fundraising events; in-kind support; and investment income. Investment income is put in the group revenue category because nonprofits are expected to spend investment revenue in line with the donors' will (Kim et al., 2017; Young, 2007). *Private Revenue* includes admission fees, individual ticket sales, subscriptions, tuition fees, workshop and lecture fees, special events, gift shop purchases, concessions, and parking fees. Finally, *Trade Revenue* items are contracted services fees, touring fees and touring exhibitions, rental income, advertising, sponsorship, and royalty rights fees. Table 1 summarizes the sources of revenue that belong to each group. It should be noted that we do not expect every nonprofit to draw income from each of the revenue items that we use to operationalize the four revenue types, which is impractical in reality. For instance, an

organization may not have any rental income or fees from royalty rights but have revenue from contracted services that we label as trade revenue.

[Table 1]

### *Control Variables*

The empirical model controls for a set of variables selected based on earlier studies (Carroll & Stater, 2009; Chikoto & Neely, 2014; Kim et al., 2017; Keating et al., 2005; Kim, 2016; Mayer et al., 2014). They are organization size (measured by log transformation of total assets), annual budget (measured by total expenses), age (years of operation), free attendance ratio, paid workforce size, volunteer workforce size, and type of organization. Organization size, annual budget, paid workforce size, and volunteer workforce size accounts for the variation in service capacity among arts nonprofits. The percentage of free access to programs is controlled because offering free programs can create an additional financial burden for nonprofits and determine an organization's program focus (Kim et al., 2017). Older, more established nonprofits are likely to have more experiential knowledge that can be used to navigate turbulent times compared to newer organizations, and thus the models control for an organization's age. Organization type accounts for various kinds of arts nonprofits that face different funding opportunities and challenges. Finally, the model includes year fixed effects to control for year-specific macro shocks to the nonprofit community.<sup>1</sup> The base econometric specification is

$$FI_{it} = \alpha + MA_{it} \beta + MA_{it}^2 \beta + NMA_{it} \beta + C_{it} \beta + \theta_t + \varepsilon_{it},$$



where FI, MA, NMA, and C represent, respectively, the following groups of variables: financial indicators, benefits-based revenue, non-benefits-based revenues, and control variables. We also include a time-specific effect  $\theta_t$  and an error term  $\varepsilon_{it}$ .

#### *Four Types of Nonprofit Organizations*

To examine how different proportions of the four types of benefits-based revenues influence the corresponding types of nonprofit organizations, we classified nonprofits into four types based on Young's conceptualization: public nonprofits, group nonprofits, private nonprofits, and trade nonprofits. We used the NTEE codes to categorize organizations, based on their programs and missions, as summarized in Table 1. Approximately 9% of observations were dropped because they fell outside of the NTEE – A, Arts, Culture, and Humanities major group.<sup>2</sup>

[Table 1]

#### *Public Nonprofits*

Research institutes, arts councils, media, radio, humanities, and historic preservation nonprofits are categorized as public nonprofits. These programs are hardly “rivals” in consumption, meaning that one person's consumption of a program does not necessarily diminish another person's consumption. They are also rarely “excludable,” meaning that people who have not paid for a program are not prevented from enjoying the benefit of it. As such, they tend to target the general public in a community.

#### *Group Nonprofits*

Advocacy organizations, professional societies, ethnic awareness, folk arts, and museums belong to group nonprofits. Similar to public nonprofits, these organizations provide programs that are rarely rivals in consumption and oftentimes are not exclusive to non-payers. However, these programs tend to attract relatively narrowly defined subgroups in a community such as certain ethnic groups, modern art lovers, or children, generating benefits for those specific groups rather than the general public.

#### *Private Nonprofits*

We categorize orchestra, ballet, opera, theater, and many performing arts organizations as private nonprofits since their programs are rivals in the sense that there are limited seats available for audiences and consumption of these programs can be exclusive to non-ticket-holders.

#### *Trade Nonprofits*

We classify management assistance, fundraising and distribution, and other support organizations as trade nonprofits because these organizations realize their missions through assisting other nonprofits.

### **Descriptive Findings**

Tables 2-1 and 2-2 present descriptive statistics of key variables and control variables, respectively. All financial data represented in dollar terms are converted into constant dollars using the consumer price index (CPI) from 2016. In Table 2-1, we also provide the difference of means test (t-test) between all nonprofits and each of the four types of organizations.

The nonprofits in the sample are generally solvent, demonstrating a strong ability to meet their long-term obligations and achieve expansion and growth. The small or even negative

profitability ratios, however, indicate that these nonprofits generate low or negative monetary returns as compared to the resources they spend to run programs. As for liquidity, the average net current assets in the sample are enough to cover about four months of total expenses. Among the four types of nonprofits, public nonprofits appear to be the most liquid, whereas private nonprofits have the smallest liquidity. Finally, the positive yet small margin ratios across the four types indicate that nonprofits in the sample have savings that are about 6% to 11% of their total spending on operations.

Table 2-1 also shows that on average the four types of benefits-based revenue sources constitute 88% of total revenue. Public, group, private, and trade revenues constitute 11%, 44%, 24%, and 9%, respectively. The remaining 12% are other revenue sources that do not qualify as benefits-based revenues. Finally, correlation matrices and variance inflation factor (VIF) tests confirm that multicollinearity is not a concern.<sup>3</sup>

[Table 2-1]

[Table 2-2]

## **Analytic Results**

Table 3-1 (public and group nonprofits) and Table 3-2 (private and trade nonprofits) present the full estimations of the relationship between the proportion of benefits-based revenues and an organization's financial health, measured by four main dependent variables. We also ran the same model using four additional dependent variables. Table 4 presents the summary results

for all eight types of financial outcome variables, and the full results for additional dependent variables can be available upon request.

[Table 3-1]

[Table 3-2]

The results provide some evidence for our first hypothesis that nonprofits with a benefits-based revenue structure are more likely to have better financial outcomes, but the results need nuanced interpretation. With our second hypothesis, we expected an inverse U-shaped relationship between the growth of benefits-based revenue and the financial health indicators. As such, our model included a quadratic term for the corresponding revenue item.<sup>4</sup> Contrary to our expectation, the results in most models suggest a U-shaped relationship. For instance, in the case of group nonprofits, the margin decreases as the share of group revenue increases, but after hitting the 44% threshold, the size of margin starts to increase. In other words, we find a positive relationship between the share of benefits-based revenue and the level of financial health when the share of group revenue is greater than 44%. Before then, the larger the share of benefits-based revenue, the smaller financial benefits an organization would realize.

We find this pattern in most cases where we measured financial health in various ways—solvency, profitability, liquidity, margin, and the four organizational growth indicators. That is, the financial health outcome improves once the share of benefits-based revenues grows above a certain point. As such, we can say that the benefits-based financing strategy can help nonprofits improve their overall financial health only if they can generate a substantially large proportion of

benefits-based revenues. For instance, an organization that primarily confers public benefits will want to continue to focus on generating public revenue if its current share is over 53%.

[Table 4]

Table 4 reports turning points for each aspect of a financial health outcome. It also includes the summary results for the additional dependent variables that measure growth over time. The relatively higher turning points for public and private nonprofits, over 70% in some cases, imply that it may be unrealistic for these organizations to apply benefits-based revenue streams. On the other hand, the turning points for group and trade nonprofits, ranging from 33% to 55%, suggest that organizations that produce mainly group or trade benefits can be financially robust by employing a benefits-based revenue strategy. Figure 1 highlights the curvilinear relationships.<sup>5</sup>

[Figure 1]

## **Discussion**

The empirical findings in our analysis suggest that diversifying revenue streams is still important for nonprofits when embracing the benefits-based financing strategy. Our study points out that nonprofits need to take different strategies depending on their own capacity and the type of programs and services they deliver.

Our analyses suggest the need to invest in organizational infrastructure to capitalize on benefits-based revenues. Organizations would see a negative relationship between a financial

health indicator and the share of benefits-based revenue until its ratio reaches a certain size. If a substantially large part of its revenue comes from benefits-based revenue sources, nonprofits would see a positive relationship between financial health measures and the share of benefits-based revenue. The U-shaped relationship we found indicates that nonprofits should obtain economies of scale for raising benefits-based revenues. That is, it would take some time for a nonprofit to enjoy economic returns larger than the initial costs of developing the organizational capacity to generate benefits-based revenues, but they would enjoy the returns once they have enough capacity developed. This finding supports the recent argument that concentrating on a few revenue streams for which an organization has expertise can be more beneficial, and it is the composition of revenues, rather than just the degree of how diversified, that matters for a nonprofit's financial health (Chikoto & Neely, 2014; Shea & Wang, 2016). As such, whether to concentrate or diversify revenue streams depends largely on a nonprofit's own situation, and it is not reasonable to say that either diversifying or concentrating revenues is always preferred.

#### *The Characteristics of Revenue Types Make a Difference in Benefits-Based Financing*

Since the thresholds over which nonprofits become financially stronger are generally higher for public nonprofits and private nonprofits, organizations that produce mainly public or private benefits should take a more cautious approach to fully focus on benefits-based revenues. First, benefits-based financing would be beneficial for public nonprofits only if they can generate the majority of their revenues from public sources (i.e., government funding). According to the Government Accountability Office report (2010), many nonprofits, particularly small organizations, face difficulty fulfilling diverse reporting requirements mandated by government funders. The high administrative cost of managing grants can make it particularly challenging for

organizations that do not have enough capacity to multiple government grants to ensure that they have diversified benefits-based revenues. Further, for arts and culture organizations, relying on too much revenue from government sources can pose challenges because such funding could constrain the arts organization's freedom of expression. Some even argue that direct public funding for the arts can result in "creative stagnation" in the long run (Chartrand & McCaughy, 1989). The need for a laissez-faire approach, therefore, has led to an arm's length policy in the U.S., where around 40% of public funding for the arts is provided through state arts agencies to avoid political influence coming from the national level (Noonan, 2015). Future research may delve deeper into understanding the primary reason that prevents nonprofit arts organizations from relying dominantly on public revenues—whether it is a result of limited managing capacity or concern over freedom of expression.

Similarly, benefits-based financing strategy would be beneficial for private nonprofits only if the majority of their revenues already come from private sources. It is worth noting that most of the private nonprofits in our sample are performing arts organizations that are subject to "cost disease" pressures (Baumol & Bowen, 1966). That is, industries heavily dependent on personal labor, such as the arts sector, find it hard to increase productivity at the rate of wage inflation. As a result, the cost of producing arts programs becomes increasingly expensive over time. Thus, expanding the reliance on private revenues (e.g., admission tickets) could make ticket prices unaffordable to most audiences, which in turn makes it harder for performing arts nonprofits to survive and thrive unless they already have infrastructure to operate based off of fee-for-services. More studies are needed to investigate if this holds true in other sectors that also suffer from cost disease, such as education and childcare.

The high turning points for public and private nonprofits may also be attributed to the nature of their benefits-based revenues. The relatively moderate level of turning points for group and trade nonprofits as compared to the relatively high turning points for public and private nonprofits reinforce the widespread wisdom that nonprofits must generate income from both earned and contributed sources (e.g., Frumkin & Kim, 2001). Specifically, as shown in Table 1, group and trade revenues include the mix of earned and contributed sources, while public revenues come mostly from contributed sources and private revenues are mostly earned incomes. In other words, public and private nonprofits might run a risk of relying predominately on contributed and earned income, respectively, if they prioritize benefits-based revenues before having enough capacity and expertise in raising one type of revenue. As such, our results reinforce the importance of drawing revenues from both earned and contributed sources.

### *Caveats for Nonprofits*

Findings in our study highlight one of the working principles in the benefits theory that nonprofit managers must keep in mind of various restraining factors when pursuing a benefits-based financing strategy. As Young (2007) stresses, “it is impractical to assume that such a pure strategy would fully address a nonprofit organization’s financial challenges” (p.348). In the context of arts and cultural subsector, we highlight the issues of organizational infrastructure, the freedom of expression, and cost disease that could negate the positive effects of benefits-based revenue strategy.

As Young (2017) points out, nonprofits often have multiple stakeholders, and their revenue structure, therefore, should reflect the mixed benefits conferred, rather than relying on just one primary type. For instance, historical societies preserve historically significant sites for



the benefit of the general public. While it would be reasonable to expect government funding to be the primary source of income, these historical sites may also attract donations from people who share the value of these sites or feel attached to them. As such, the fiscal health of these historical sites would not be optimized without also exploring other potential revenues derived from those willing to support the mission of preserving them.

Nonprofit managers should carefully identify the beneficiaries of their programs to apply the benefits-based financing strategy with the caveat that there can be multiple benefits associated with any program. Nonprofit leaders should also consider organization-specific constraints when using benefits theory as a guide to constructing ideal resource portfolios. The end goal is to find the right balance between revenue generation and mission-impact, within the constraints of feasibility relevant to individual organizations.

## **Conclusion**

This study offers some evidence on how a benefits-based financing strategy contributes to strengthening the fiscal health of nonprofit organizations with a caution that the strategy may not work in a monotonic way. Before concluding this study, we must acknowledge that our findings cannot be generalized for the entire nonprofit sector because our sample covers only nonprofit arts and culture organizations. Also, due to voluntary participation, the data drawn from DataArts does not include all arts and culture nonprofits in the U.S. The sample organizations are larger and older, on average, than typical arts and culture nonprofits registered with the Internal Revenue Service (IRS). Even so, the data covers a large segment of the nonprofit arts and culture industry across the country, providing detailed information that no

other dataset could offer. Further, Kim and Charles's (2016) comparison of the DataArts cultural data profile with the NCCS 990 data concluded the data to be reliable.

Despite the limitations discussed above, this study offers important lessons for the nonprofit sector in general as it discusses whether and how a nonprofit should diversify its revenue streams to reflect its program services and based on one's organizational capacity.

While our study opens up avenues for future research, additional empirical studies in this context could help nonprofits find strategic ways to diversify their revenue streams. In specific, there should be more empirical studies testing the idea by focusing on different subsectors.

Researchers can take the same principles to identify the four types of benefits that nonprofits in other subsectors generate to test if the benefits theory-based financing strategy also works well in other subsectors. Finally, future studies should explore the optimal share of the dominant type of revenue and find an optimal mix for the various types of revenues.

## Appendix A. Summary of Data Cleaning

	Number of Obs	Percent of Total
Beginning Sample Size	81,735	
less: Observations prior to 2008 or after 2016; Organizations fall beyond the scope of this study (not classified as NTEE-A); duplicates	17,754	22%
less: Missing/erroneous Public Revenue, Group Revenue, Private Revenue, and Trade Revenue	12,643	15%
less: Missing/erroneous Solvency, Profitability, Liquidity, and Margin	20,303	25%
less: Outliers in Employee Size, FTE Volunteers, and negative Organization Age; Missing Total Assets or Total Expense	865	1%
Final Sample Size	30,170	37%

## Notes

1. We do not include an organization fixed effect, which controls for unobserved differences across organizations, because our hypotheses are about differences across organizations and types of organizations rather than differences within an organization. It is unlikely that a public nonprofit with programs that target mostly the general public (e.g., arts councils) would become a private nonprofit with programs that are based on fees-for-services in the following year.
2. A99 – Arts, Culture & Humanities Not Elsewhere Classified (N.E.C.) is excluded due to the broadness of the category.
3. Full results available upon request.
4. “A nonlinear regression model is chosen based on theoretical considerations from the subject-matter field.” (Montgomery, Peck, & Vining, 2012, p. 411). Our empirical model includes a quadratic term because benefits theory points out that many nonprofits produce more than one type of benefits.
5. Other figures available upon request.

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Table 1. Classification of Nonprofits and Revenue Sources Based on Benefits Theory

	Nonprofit Types (NTEE-A)	Revenue Sources
Public Benefits	A05 – Research Institutes & Public Policy Analysis, A25 – Arts Education, A26 – Arts & Humanities Councils & Agencies A30 – Media & Communications, A31 – Film & Video, A32 – Television, A33 – Printing & Publishing, A34 – Radio, A70 – Humanities, A80 – Historical Organizations, A82 – Historical Societies & Historic Preservation, and A84 – Commemorative Events	Local (city & county), state, and federal funding
Group Benefits	A01 – Alliances & Advocacy, A03 – Professional Societies & Associations, A20 – Arts & Culture, A23 – Cultural & Ethnic Awareness, A24 – Folk Arts, A27 – Community Celebrations, A40 – Visual Arts, A50 – Museums, A51 – Art Museums, A52 Children's Museums, A53 – Folk Arts Museums, A54 – History Museums, A56 – Natural History & Natural Science, A57 – Science & Technology Museums, and A90 – Arts Services	Membership dues, individual & board of trustee support, corporate, foundation, & parent organization support, special fundraising events, in-kind support, and investment income.
Private Benefits	A60 – Performing Arts, A61 – Performing Arts Centers, A62 – Dance, A63 – Ballet, A65 – Theater, A68 – Music, A69 – Symphony Orchestras, A6A – Opera, A6B – Singing & Choral Groups, A6C – Bands & Ensembles, and A6E - Performing Arts Schools	Admission fees, individual ticket sales & subscriptions, tuitions, workshop & lecture fees, special events, & gift shop, concession, and parking fees
Trade Benefits	A02 – Management & Technical Assistance, A11 – Single Organization Support, A12 – Fund Raising & Fund Distribution, and A19 – Support N.E.C.	Total contracted services fees, touring & touring exhibition fees, rental income, advertising, sponsorship, and total royalties rights fees

Table 2-1. Summary of Key Variables

Variable	Description	All Nonprofits (N=30,170)		Public Benefits- Oriented NPOs (N=5,823)		Group Benefits- Oriented NPOs (N=8,488)		Private Benefits- Oriented NPOs (N=15,040)		Trade Benefits- Oriented NPOs (N=819)	
		Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
<b>DEPENDENT VARIABLE</b>											
Solvency	(Total Assets - Total Liabilities) / Total Revenue	1.39	(2.19)	1.60 <sup>a,c,d,e</sup>	(2.38)	2.15 <sup>a,b,d,e</sup>	(2.85)	0.88 <sup>a,b,c,e</sup>	(1.43)	1.28 <sup>b,c,d</sup>	(2.00)
Profitability	(Total Revenue - Total Expenses) / Total Assets	0.004	(0.57)	0.03 <sup>a,d,e</sup>	(0.48)	0.02 <sup>d</sup>	(0.51)	-0.01 <sup>a,b,c</sup>	(0.63)	-0.02 <sup>b</sup>	(0.55)
Liquidity	12 * [Current Assets - (current Liabilities + Temporarily Restricted Net Assets)] / (Total Expenses - Total Depreciation)	4.01	(12.64)	5.79 <sup>a,d</sup>	(14.00)	5.34 <sup>a,d</sup>	(16.08)	2.53 <sup>a,b,c,e</sup>	(9.13)	4.66 <sup>d</sup>	(14.22)
Margin	(Change in Unrestricted Net Assets + Total Depreciation) / Total Operating Expenses	0.08	(0.32)	0.09 <sup>a,c,d</sup>	(0.35)	0.11 <sup>a,b,d,e</sup>	(0.38)	0.06 <sup>a,b,c</sup>	(0.26)	0.08 <sup>c</sup>	(0.34)
<b>INDEPENDENT VARIABLE</b>											
Percent of Total Revenue	The amount of [type] revenue items as a percentage of total revenue										
Public		0.11	(0.16)	0.17 <sup>a,c,d,e</sup>	(0.21)	0.13	(0.17)	0.08	(0.11)	0.10	(0.16)
Group		0.44	(0.24)	0.44	(0.25)	0.47 <sup>a,b,d</sup>	(0.25)	0.42	(0.22)	0.47	(0.27)
Private		0.24	(0.23)	0.17	(0.22)	0.17	(0.20)	0.30 <sup>a,b,c,e</sup>	(0.23)	0.18	(0.23)
Trade		0.09	(0.14)	0.10	(0.15)	0.09	(0.14)	0.09	(0.13)	0.10 <sup>c,d</sup>	(0.17)
Squared Terms	The quadratic term of the [type] revenue items as a percentage of total revenue										
Public		0.04	(0.11)	0.07	(0.16)						
Group		0.25	(0.23)			0.29	(0.25)				
Private		0.11	(0.17)					0.15	(0.18)		
Trade		0.03	(0.09)							0.04	(0.10)

Notes: alphabets indicate the statistical difference at the 0.01 level. “a” compares to all nonprofits, “b” compares to the public nonprofits, “c” compares to group nonprofits, “d” compares to private nonprofits, and “e” compares to trade nonprofits.

Table 2-2. Summary of Control Variables

CONTROL VARIABLES	Description	All Nonprofits (N=30,170)	Public Benefits - Oriented NPOs (N=5,823)	Group Benefits - Oriented NPOs (N=8,488)	Private Benefits - Oriented NPOs (N=15,040)	Trade Benefits - Oriented NPOs (N=819)
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Organization Size	Log transformation of total assets	13.10 (2.52)	13.35 (2.17)	13.74 (2.63)	12.63 (2.50)	13.37 (2.19)
Annual Budget	Total expenses in millions	3.24 (14.72)	2.55 (9.87)	4.05 (19.03)	3.11 (13.83)	2.10 (3.67)
Age	The filing year minus the year founded	36.31 (30.06)	39.59 (35.58)	39.22 (34.32)	33.46 (24.76)	35.35 (22.55)
Free Attendance Ratio	The ratio of free admissions to total admissions	0.44 (0.36)	0.56 (0.39)	0.55 (0.37)	0.33 (0.31)	0.44 (0.39)
Paid Workforce Size	The number of full-time employees & full-time equivalents in hundreds	0.43 (1.35)	0.28 (0.79)	0.39 (1.22)	0.53 (1.59)	0.26 (0.58)
Volunteer Workforce Size	The number of full-time equivalent volunteers divided in hundreds	1.21 (3.83)	1.14 (4.12)	1.40 (4.42)	1.14 (3.41)	0.85 (1.95)
Organization Type	based on the National Standard for Arts Information Exchange Project (NISIP) classification system					
Multidisciplinary	Interdisciplinary (11) Multidisciplinary (14)	0.29 (0.45)	0.46 (0.50)	0.47 (0.50)	0.10 (0.31)	0.41 (0.49)
Visual Arts	Visual Arts (05), Design Arts (06), Photography (08)	0.11 (0.31)	0.12 (0.32)	0.30 (0.46)	0.00 (0.01)	0.14 (0.35)
Performing Arts	Dance (01), Music (02), Opera/Musical Theatre (03), Theatre (04)	0.49 (0.50)	0.08 (0.27)	0.09 (0.28)	0.89 (0.32)	0.42 (0.49)
Media	Media Arts (09)	0.04 (0.20)	0.19 (0.39)	0.01 (0.11)	0.001 (0.03)	0.02 (0.15)
Other	Crafts (07), Literature (10), Folklife/Traditional Arts (12), Humanities (13), Non-Arts/Non-Humanities (15)	0.07 (0.25)	0.15 (0.35)	0.13 (0.34)	0.01 (0.09)	0.01 (0.11)

Table 3-1. Regression Results by Types of Nonprofits

	Public Benefits-oriented				Group Benefits-oriented			
	Solvency	Profitability	Liquidity	Margin	Solvency	Profitability	Liquidity	Margin
<b>MAIN VARIABLES</b>								
Percent of Total Revenue								
Public	-1.10 *** (0.41)	-0.12 (0.11)	-18.56 *** (2.75)	-0.36 *** (0.08)	-1.08 *** (0.18)	-0.05 (0.05)	-5.33 *** (1.24)	-0.07 * (0.04)
Group	0.29 (0.20)	0.10 * (0.06)	-2.96 * (1.58)	0.00 (0.04)	0.51 (0.41)	-0.21 * (0.11)	-17.47 *** (2.94)	-0.70 *** (0.08)
Private	-0.67 *** (0.21)	0.01 (0.06)	-11.09 *** (1.47)	-0.15 *** (0.04)	-0.30 * (0.18)	-0.11 ** (0.05)	-2.79 ** (1.19)	-0.22 *** (0.03)
Trade	-0.82 *** (0.22)	0.01 (0.06)	-7.89 *** (1.51)	-0.23 *** (0.04)	-0.35 * (0.19)	-0.06 (0.06)	-7.10 *** (1.25)	-0.20 *** (0.03)
Squared Terms								
Public	0.11 (0.42)	0.17 (0.13)	13.05 *** (2.93)	0.34 *** (0.09)				
Group					0.43 (0.39)	0.25 ** (0.10)	22.45 *** (3.06)	0.79 *** (0.08)
<b>CONTROL VARIABLES</b>								
Organization Size	0.50 *** (0.02)	0.02 ** (0.01)	0.71 *** (0.12)	0.03 *** (0.00)	0.66 *** (0.01)	0.01 *** (0.00)	0.78 *** (0.10)	0.03 *** (0.00)
Annual Budget	-0.02 *** (0.01)	-0.001 *** (0.00)	-0.07 *** (0.02)	-0.002 *** (0.00)	0.00 (0.00)	-0.001 ** (0.00)	0.03 (0.02)	0.00 (0.00)
Age	1.22 *** (0.13)	-0.07 *** (0.02)	4.66 *** (0.79)	-0.06 *** (0.02)	0.48 *** (0.09)	-0.06 *** (0.01)	3.38 *** (0.70)	0.02 (0.02)
Free Attendance Ratio	-0.36 *** (0.07)	-0.02 (0.02)	-1.35 *** (0.50)	-0.03 ** (0.01)	-0.14 * (0.08)	0.01 (0.02)	2.54 *** (0.53)	-0.07 *** (0.01)
Paid Workforce Size	-0.33 *** (0.05)	0.00 (0.01)	-1.09 ** (0.43)	0.00 (0.01)	-0.27 *** (0.06)	0.00 (0.01)	-2.18 *** (0.32)	-0.01 *** (0.00)
Volunteer Workforce Size	-0.03 ** (0.01)	-0.001 * (0.00)	-0.12 ** (0.06)	-0.002 ** (0.00)	-0.04 *** (0.00)	0.00 (0.00)	-0.08 *** (0.02)	-0.002 *** (0.00)
Organization Type								
Multidisciplinary	-0.10 (0.09)	0.00 (0.02)	-2.40 *** (0.65)	0.00 (0.02)	-0.26 *** (0.08)	0.01 (0.02)	-0.23 (0.56)	0.00 (0.01)
Visual Arts	-0.03 (0.11)	0.02 (0.02)	-1.54 * (0.91)	0.04 * (0.02)	-0.19 ** (0.09)	0.01 (0.02)	-1.43 ** (0.63)	0.00 (0.01)
Performing Arts	-0.54 *** (0.12)	0.03 (0.03)	-2.72 *** (0.78)	-0.02 (0.02)	-0.53 *** (0.09)	-0.01 (0.03)	-1.16 * (0.62)	0.03 (0.02)
Media	-1.06 *** (0.09)	-0.02 (0.03)	-5.30 *** (0.64)	-0.03 * (0.02)	-0.74 *** (0.15)	0.07 (0.07)	-1.49 (0.91)	-0.06 * (0.03)
Constant	-4.70 *** (0.30)	-0.21 * (0.12)	4.60 ** (1.82)	-0.22 *** (0.05)	-6.80 *** (0.24)	-0.12 (0.09)	-3.87 ** (1.64)	-0.05 (0.04)
R-squared	0.337	0.014	0.083	0.058	0.396	0.014	0.063	0.075
Observations	5,823				8,488			

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Year fixed effect.

Table 3-2. Regression Results by Types of Nonprofits

	Private Benefits-oriented				Trade Benefits-oriented			
	Solvency	Profitability	Liquidity	Margin	Solvency	Profitability	Liquidity	Margin
<b>MAIN VARIABLES</b>								
Percent of Total Revenue								
Public	0.27 ** (0.12)	-0.08 (0.07)	-2.01 * (1.07)	-0.07 * (0.04)	-0.24 (0.41)	0.07 (0.19)	-10.52 *** (3.53)	0.11 (0.15)
Group	0.53 *** (0.09)	0.06 (0.04)	3.69 *** (0.78)	-0.01 (0.03)	0.41 (0.36)	0.07 (0.12)	-1.67 (3.37)	0.09 (0.08)
Private	-0.44 ** (0.18)	-0.33 *** (0.09)	-9.10 *** (1.34)	-0.40 *** (0.05)	-0.32 (0.36)	-0.07 (0.13)	-11.82 *** (3.31)	-0.14 * (0.07)
Trade	0.70 *** (0.11)	-0.18 *** (0.06)	0.30 (0.79)	-0.17 *** (0.03)	-2.69 *** (0.80)	-1.03 *** (0.35)	-44.48 *** (7.95)	-0.51 *** (0.17)
Squared Terms								
Private	0.53 *** (0.20)	0.23 ** (0.10)	10.92 *** (1.34)	0.32 *** (0.04)				
Trade					4.07 *** (1.15)	1.37 ** (0.52)	57.87 *** (10.95)	0.68 *** (0.24)
<b>CONTROL VARIABLES</b>								
Organization Size	0.34 *** (0.01)	0.04 *** (0.00)	0.09 * (0.05)	0.02 *** (0.00)	0.59 *** (0.05)	0.06 ** (0.02)	1.68 *** (0.40)	0.04 *** (0.01)
Annual Budget	0.00 * (0.00)	-0.001 *** (0.00)	0.00 (0.01)	-0.001 *** (0.00)	-0.09 *** (0.02)	-0.03 *** (0.01)	-0.77 *** (0.22)	-0.01 ** (0.01)
Age	0.33 *** (0.06)	-0.12 *** (0.02)	2.77 *** (0.44)	-0.07 *** (0.01)	0.88 ** (0.39)	-0.14 (0.10)	18.31 *** (3.35)	0.08 (0.07)
Free Attendance Ratio	0.14 *** (0.04)	-0.01 (0.02)	1.38 *** (0.32)	-0.03 *** (0.01)	0.34 ** (0.17)	-0.01 (0.05)	2.96 ** (1.40)	-0.03 (0.04)
Paid Workforce Size	-0.15 *** (0.02)	-0.01 *** (0.00)	-0.44 *** (0.10)	0.00 (0.00)	-0.22 ** (0.10)	0.04 (0.03)	-3.57 ** (1.40)	-0.01 (0.02)
Volunteer Workforce Size	0.00 (0.00)	0.00 (0.00)	0.04 * (0.02)	0.00 (0.00)	0.03 (0.04)	-0.01 (0.02)	-0.51 ** (0.22)	0.00 (0.00)
Organization Type								
Multidisciplinary	0.04 (0.08)	-0.03 (0.07)	-2.46 *** (0.53)	0.01 (0.02)	0.96 *** (0.30)	-0.17 ** (0.07)	3.33 (2.72)	0.10 (0.07)
Visual Arts	0.58 *** (0.09)	0.95 *** (0.07)	-7.84 *** (0.63)	-0.04 * (0.02)	1.34 *** (0.33)	-0.18 ** (0.08)	0.67 (2.91)	0.02 (0.07)
Performing Arts	-0.15 ** (0.07)	-0.04 (0.07)	-2.11 *** (0.49)	-0.02 (0.02)	0.99 *** (0.30)	-0.13 * (0.07)	4.78 * (2.72)	0.08 (0.06)
Media	-0.19 * (0.11)	-0.01 (0.09)	-1.95 ** (0.84)	-0.17 ** (0.07)	0.93 *** (0.34)	-0.16 ** (0.08)	1.87 (2.79)	0.16 * (0.09)
Constant	-3.63 *** (0.14)	-0.34 *** (0.09)	1.91 * (1.01)	-0.03 (0.03)	-8.08 *** (0.82)	-0.55 (0.34)	-19.38 *** (6.31)	-0.62 *** (0.14)
R-squared	0.319	0.026	0.031	0.044	0.383	0.063	0.194	0.115
Observations	15,040				819			

Notes: Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Year fixed effect.

Table 4. Summary Results of Matching Revenue with Benefits and Organizational Growth

	Solvency	Profitability	Liquidity	Margin	NA3	NA20	NI	RC3
Public Benefits x Public Revenue	Negative		Negative	Negative	Negative	Negative		Negative
Public Benefits x Public Revenue <sup>2</sup>			Positive	Positive	Positive	Positive		Positive
Turning Points			71%	53%	48%	40%		10%
Group Benefits x Group Revenue		Negative	Negative	Negative	Negative	Negative	Negative	
Group Benefits x Group Revenue <sup>2</sup>		Positive	Positive	Positive	Positive	Positive	Positive	
Turning Points		43%	39%	44%	46%	53%	55%	
Private Benefits x Private Revenue	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative
Private Benefits x Private Revenue <sup>2</sup>	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Turning Points	41%	71%	42%	62%	88%	58%	54%	60%
Trade Benefits x Trade Revenue	Negative	Negative	Negative	Negative		Negative	Negative	
Trade Benefits x Trade Revenue <sup>2</sup>	Positive	Positive	Positive	Positive			Positive	
Turning Points	33%	38%	38%	38%			33%	

Notes: NA3 = net assets change over a three-year period; NA20 = 1 indicates a nonprofit whose net assets increased by at least 20% compared to two years ago; NI = 1 indicates a nonprofit's net income is positive during a three-year period; RC3 = revenue change over a three-year period.

Figure 1. Curvilinear Relationship between Benefits-based Revenue Streams and Financial Health

