Mission-Based Objectives, Market-Based Funding: The Relationship between Earned Revenue and Charitable Mission

DISSERTATION

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By

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Abstract

All organizations need resources. This resource dependence may offer one reason for nonprofit organizations to pursue earned revenue--to provide an “independent” stream of resources to the organization, thereby reducing dependence on other sources of income, such as private donations (Froelich 1999). Yet, nonprofit organizations may pursue earned income for reasons other than revenue diversification. James and Young (2007) suggest that nonprofit organizations may pursue earned income to increase their investment in - and thus expand - their mission-driven services. The goals of this study are to consider the relationship between earned income and charitable mission, and to introduce a more robust measure of earned revenue that links to service-level outcomes.

Prior literature on earned revenue starts with a broad, mostly conceptual approach towards commercialization, or total earned revenue (Gilbert 1985; Salamon 1993; Dees 1998; Young and Salamon 2002). With this work, I attempt to address previous shortcomings by (1) developing a more nuanced, theory-based approach to measure earned revenue; and (2) testing the new measure of earned revenue with a newly available dataset from the Culture Data Project. My sample of 2115 organizations from 2007-2010 includes information on both revenue variables and program level outputs, allowing me to measure the relationship between earned income and indicators of charitable mission, measured as (1) donated income and (2) service level outputs.
This study demonstrates that the nature of earned income activity matters for charitable mission. By categorizing earned revenue activities on dimensions of organizational technology and target markets, I demonstrate that different types of earned revenue have different effects on charitable mission. Organizations tempted to maximize the cost complementarities afforded by using the same technologies for multiple programs or services might end up generating revenue at the expense of their charitable missions, rather than in their support. Using existing technologies to deliver new goods and services may ultimately damage charitable mission, while offering new goods and services with new technologies may be able to complement certain mission-related service-level outcomes. At least for arts and culture organizations, the connections between the nature of an organization’s earned revenue stream to its core technology and markets, can help shed light on the relationship between earned revenue and charitable mission.
This dissertation is dedicated to Elan, my stalwart tree, and Baby Steps, who is already changing the world.
Acknowledgments

Thank you to:

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Dr. Stephanie Moulton whose guidance over the course of this doctoral program has been invaluable.

Dr. Craig Boardman for teaching me the craft of writing.

Dr. Sara Wallace Goodman for being an inspiration - you (should) know I have always looked up to you.

Rachel Tabakman, Idit Solomon, Stephanie Glass Wapner for your consistent belief and confidence I could do this.

My fellow doctoral classmates.

My family.
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**INTRODUCTION**

All organizations need resources. This resource dependence may offer one reason for nonprofit organizations to pursue earned revenue—to provide an “independent” stream of resources to the organization, thereby reducing dependence on other sources of income, such as private donations (Froelich 1999). The relationship between earned income and the overall revenue portfolio of a nonprofit organization has been the subject of a body of literature. Additionally, the impact of earned revenue has been looked at in terms of organizations’ financial portfolios and organizational stability.

Yet, nonprofit organizations may pursue earned income for reasons other than revenue diversification. James and Young (2007) suggest that nonprofit organizations may pursue earned income to increase their investment in—and thus expand—their mission-driven services. The relationship between earned income and charitable mission has not received as much attention in prior research, at least in empirical studies. This may be due to limitations in the data available, or limitations in the theoretical approach to measuring earned income.

The data employed to date has been mainly data from IRS 990 forms made available through the National Center for Charitable Statistics. The IRS 990 data does not include information on program services or detailed revenue data that could be used to measure charitable mission. One of the primary objectives of this study is therefore to use
more a more detailed dataset consider the relationship between earned income and charitable mission. In this study, the extent to which a nonprofit is achieving its charitable mission will be measured in two ways: (1) donated income and (2) service level outcomes. First, an increase (or decrease) in private donations to an organization may signal an increase (or decrease) in the charitable mission of the organization. To the extent that donors give to a nonprofit organization because they believe it is meeting a charitable need, an increase (or decrease) in giving may be an indicator of charitable mission (Bekkers 2003; James 2003). Second, an increase (or decrease) in service level outcomes may indicate changes to the charitable mission.

Lack of prior research connecting earned revenue and charitable mission could also be due to limitations in the measurement of earned income. Therefore, a second objective of this study is to unpack the different components of earned income. Prior research tends to treat earned income as a “black box,” combining all sources of earned revenue together in one category, irrespective of the way in which it was acquired. There is reason to suggest that the nature of the earned revenue activities, and that different earned revenue ventures will have different effects on program-level outcomes. Some market-based activities are embedded within the organization’s core mission-driven activities, and target the same markets as the core mission driven activity (Alter 2004, Cooney 2006).

This study takes advantage of newly available data from the Culture Data Project that includes program-level outputs to begin to explore the relationships between revenue sources - specifically, earned revenue - and charitable mission. The goal of this study is
therefore to introduce a more robust measure of earned revenue, and to move the discussion of earned revenue beyond financial outcomes into service level outcomes.

DEFINING EARNED REVENUE

Nonprofit organizations are considered tax exempt under section 501(c)3 of the Internal Revenue Code if they operate exclusively for one of the following purposes: charitable, religious, educational, scientific, literary, testing for public safety, fostering national or amateur sports competition, and preventing cruelty to children or animals. In 2010, these types of organizations reported $1.5 trillion in total revenue, over 70 percent of which came from earned revenue, or the revenue generated from the sale of goods and services (Blackwood, et al. 2012). Earned revenue represents the total amount of income an organization receives from selling goods or services.

The Internal Revenue Service (IRS) breaks earned revenue into two broad categories: unrelated and related business income. Unrelated business income is subject to taxation, or the Unrelated Business Income Tax (UBIT). The IRS defines unrelated business income as a trade or business that is regularly carried on and is not “substantially related to furthering the exempt purpose of the organization.” For example, income from advertising generally is subject to UBIT. Another example of an activity subject to UBIT is a university selling gym memberships to the general public. This activity is considered a business, regularly carried on, and not substantially related

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to the exempt purpose of education.² By contrast, related business income or “program service revenue” is income derived from monetized programs/services that relate directly to the organization’s exempt purpose – i.e.: a university charging tuition, or a dance troupe selling tickets to a performance.

Prior literature on earned revenue starts with a broad, mostly conceptual look at commercialization, or total earned revenue (Gilbert 1985; Salamon 1993; Dees 1998; Young and Salamon 2002). Early attempts to categorize revenue separate program service revenue and revenue subject to UBIT (Unrelated Business Income Tax). Some authors then attempt to further connect the nature of program service revenue activities to charitable mission activities by looking at each activity’s utility or collective nature (relationship to charitable mission) and profitability (James 1983, Weisbrod 1998). Figure 1 demonstrates early attempts to assess earned revenue as it relates to charitable mission.

² [http://www.wsu.edu/genacct/unrelBusTaxInc.htm](http://www.wsu.edu/genacct/unrelBusTaxInc.htm) <accessed 7/3/14>
Categorizing and Analyzing Earned Income: Prior Studies

Some scholars offer typologies or categorizations to apply to revenue-generating activities in order to strengthen the connection to mission; however, most of these pieces are conceptual in nature. For example, James (1983) and Cordes and Weisbrod (1998a) use cross-subsidization (using revenue-generating activities to supplement deficit-incurring activities) and cost-complementarities (the ability to shift costs of taxable income activities to service-related activities) to start to classify revenue-generating activities. Oster (1995) offers a product-portfolio matrix, enhanced by Frumkin and Andre-Clark (2000), in which she connects an activity’s contribution to mission and contribution to an organization’s economic vitality. Weisbrod (1998) similarly proposes classifying goods based the private versus public benefits that goods can offer and their revenue generating potential, categorizing goods as preferred collective (public benefit, difficult to sell on the open market), preferred private (public benefit/can be made
available to clients regardless of ability to pay but can also be sold on the private market), and non-preferred private (sold on private market with sole benefit of generating revenue for collective goods). Anheier and Toepler (1998) offer a subsector-specific classification applicable to arts organizations, sorting revenue into admissions and ancillary operations. Table 1 offers a snapshot of the attempts to connect earned revenue to core mission-related activities.
<table>
<thead>
<tr>
<th>Author(s) (Year)</th>
<th>Proposed Measure (Yes/No)</th>
<th>Proposed Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>James (1983)</td>
<td>Y</td>
<td>use of cross subsidization - 3 classifications: UTILITY - i.e.: activity that yields profit but not utility (selling a t-shirt), PROFIT w/ NEGATIVE UTILITY at margin (poor quality print), NO PROFIT (or has a loss) w/ POSITIVE UTILITY (free trips for children)</td>
</tr>
<tr>
<td>Gilbert (1985)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Salamon (1993)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Oster (1995)</td>
<td>Y</td>
<td>product-portfolio matrix: contribution to organization's mission, contribution to organization’s economic vitality</td>
</tr>
<tr>
<td>Dees (1998)</td>
<td>Y</td>
<td>social enterprise spectrum: purely philanthropic (appeal to goodwill, mission driven, social value) - purely commercial (appeal to self-interest, market driven, economic value)</td>
</tr>
<tr>
<td>Weisbrod (1998)</td>
<td>Y</td>
<td>3 classifications of goods/services: PREFERRED COLLECTIVE good (difficult to sell in private market), PREFERRED PRIVATE good (can be sold in private market but may make available to consumers independent of ability to pay), NONPREFERRED PRIVATE good (sole purpose: generating revenue for the preferred good)</td>
</tr>
<tr>
<td>Cordes and Weisbrod (1998a - book chapter)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Segal and Weisbrod (1998)</td>
<td>Y</td>
<td>program service revenue (UBIT+ untaxed activities treated together)</td>
</tr>
<tr>
<td>LaMay and Weisbrod (1998)</td>
<td>N</td>
<td>discuss four revenue sources: government grants, private donations, airtime revenues, revenues from ancillary goods/services</td>
</tr>
<tr>
<td>Frumkin and Andre-Clark (2000)</td>
<td>Y</td>
<td>core function: nonprofits as service delivery vehicles or producers of expressive outputs --&gt; 2x2 matrix: commitment to values/commitment to performance - the commercial nonprofit is low values/high performance</td>
</tr>
<tr>
<td>James (2003)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Hughes and Luksetich (2004)</td>
<td>Y</td>
<td>&quot;program service delivery&quot; - measured as program spending; authors tend to group private income sources together (donations and earned income)</td>
</tr>
<tr>
<td>Dart (2004)</td>
<td>Y</td>
<td>four aspects of being business-like: goals (revenue generation, profit, financial surplus); service delivery (i.e.: servicing a high volume of clients); management (organization level); organizational rhetoric (discourse, language, terminology)</td>
</tr>
<tr>
<td>Weerawardena, McDonald, and Mort (2010)</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Snapshot of Early Conceptual Measures Connecting Earned Revenue to Mission
The studies described above laid the conceptual groundwork tying earned revenue to charitable mission. Several authors attempt to empirically explore the connections between earned revenue and core mission activities, starting with measures of total earned revenue. Van der Haijden (2013) uses data from the Central Bureau for Fundraising (the Dutch charity registrar) to examine potential scale efficiencies (reminiscent of cross-subsidization and cost complementarities). His independent variable is total earned revenue as the independent variable, and his dependent variables of interest are program, administrative, and fundraising ratios. Other non-IRS-dependent studies include case studies and literature reviews. For example, Young (1998) uses data from national umbrella associations to examine the nature of income from sales of services in the social services subsector. Eikenberry and Kluver’s 2004 study on the effects of marketization look at commercial revenue’s effects on nonprofits as value guardians, advocates, and builders of social capital. Similarly, Boyle’s (2007) study of government reports in Australia assesses how changes the organizational structure of symphony orchestras affected their ability to achieve objectives such as program access.

One effect commonly evaluated is that of crowding out – that is, whether earned income displaces income from other sources (government sources, private donations) or attracts additional dollars. The majority of the literature attempting to model these questions relies on the National Center of Charitable Statistics’ databases of IRS Form 990 files. Yetman and Yetman (2003) specifically look at UBIT’s effect on donations, 3

3 The Form 990 is the reporting form the IRS requires tax-exempt organizations to file in order to provide information about mission, programs, and finances.
as opposed to program service revenue. Tinkelman and Neely (2011) explore the effect of changes in program service revenue on direct contributions. Ratios represent another common dependent variable in earned revenue studies that can be assessed using IRS data. Hughes and Luksetich (2004) look at mission displacement by assessing the effect of program service revenue on program expenditures. Table 2 provides an overview of the literature empirically tying earned revenue to service-level outcomes.
<table>
<thead>
<tr>
<th>Author</th>
<th>Research Question</th>
<th>Data Source (n)</th>
<th>Earned Revenue as IV</th>
<th>DV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young (1998)</td>
<td>the nature of income from sales of services in the social services subsector</td>
<td>national umbrella associations (6)</td>
<td>change in program fees (day care, camp), unrelated income (special fundraising, facilities rental), total sales (program fees + unrelated income + health club fees)</td>
<td>variety of commercial activity; growth of fee income; increase in cause-related marketing with businesses</td>
</tr>
<tr>
<td>Yetman and Yetman (2003)</td>
<td>the effects of nonprofits' taxable activities on the supply donations</td>
<td>matched set of IRS 990s and 990-Ts from 1993-1995 (703 orgs, 1,824 observations)</td>
<td>UBIT</td>
<td>donations</td>
</tr>
<tr>
<td>Hughes and Luksetich (2004)</td>
<td>&quot;... whether greater reliance on private funding and commercial ventures will ultimately cause nonprofit arts organizations to place less emphasis on program services and more emphasis on fundraising and management expenses&quot;</td>
<td>IRS SOI Files for orgs filing from 1987-1996 (209)</td>
<td>program services (excluding membership dues)</td>
<td>program expenditures</td>
</tr>
<tr>
<td>Eikenberry and Kluver (2004)</td>
<td>effects of marketization on civil society (democracy, citizenship)</td>
<td>literature review</td>
<td>commercial revenue</td>
<td>value guardians, service and advocacy, building social capital</td>
</tr>
<tr>
<td>Boyle (2007)</td>
<td>how changes to the organizational structure of symphony orchestras affected their ability to achieve a number of objectives</td>
<td>government reports from 1979-2002, corporatization literature (6)</td>
<td>total earned revenue</td>
<td>access to classical music performances</td>
</tr>
<tr>
<td>Tinkelman and Neely (2011)</td>
<td>&quot;...we sought to determine whether evidence was consistent with the theory that the receipt of government grants provides a quality signal that moderates or counteracts &quot;crowding-out&quot; effects&quot;</td>
<td>NCCS digitized data 2001-2003 (119,113 for first- and second-stage models, 119,091 for third-stage model)</td>
<td>change in program service revenue</td>
<td>change in direct contributions</td>
</tr>
<tr>
<td>Carroll and Calabrese (2013)</td>
<td>whether nonprofit contribution and program service revenues are correlated with state tax burden</td>
<td>IRS Core files from NCCS - panel data from all states from 1991-2001 (50)</td>
<td>program service revenue (including government fees and contracts)</td>
<td>state tax burden</td>
</tr>
<tr>
<td>van der Haijden (2013)</td>
<td>potential scale efficiencies</td>
<td>Central Bureau for Fundraising - Dutch charity registrar, 2005-2009 (1,258)</td>
<td>total earned revenue</td>
<td>program ratio, administrative ratio, fundraising ratio</td>
</tr>
</tbody>
</table>

Table 2 Snapshot of Early Empirical Measures Connecting Earned Revenue to Mission
On the other hand, Sloan’s (1998) comparison of for-profit and nonprofit hospitals shows that hospitals that increase their earned revenue activities may do so at the expense of public service provision such as uncompensated care, demonstrating a potential substitution effect. Baber et al. (2002) attempt to predict program spending ratios based on donation resources in an effort to link organizational strategic choice, size, and charitable objective, but their focus is primarily on financial statement analyses itself (not mission per se), and their sample size is small (n=6).

Fischer et al. (2011) offer some insight by looking at the public versus private nature of the services provided, arguing that revenue strategies should be based on the nature of benefits provided, and, therefore, those who would be willing to pay, but program revenue is their dependent variable. In addition, some studies attempt to look at innovation and mission connection, but not necessarily connected to earned revenue per se. Cordes and Weisbrod (1998b) use commercial revenue (excluding UBIT) as the dependent variable to favorable tax treatment of nonprofit commercial activities. Kerlin and Pollak (2011) also use commercial revenue as a dependent variable to look at the effects of trends in government grants and private contributions. Table 3 provides an overview of earned revenue operationalized as a dependent or control variable.
<table>
<thead>
<tr>
<th>Author</th>
<th>Research Question</th>
<th>Data Source (n)</th>
<th>Earned Revenue as DV</th>
<th>Earned Revenue as CV</th>
<th>DV (if not Earned Revenue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cordes and Weisbrod (1998b - JPAM)</td>
<td>the effects of the favorable tax treatment of nonprofit commercial activities are best understood in a framework that explicitly accounts for a number of interactions</td>
<td>data from 1992 Statistics of Income (SOI) public-use sample of IRS 990 tax returns (9,104)</td>
<td>commercial share excluding revenue reported as UBIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frumkin and Kim (2001)</td>
<td>&quot;...whether operational efficiency is recognized and rewarded by the private funders that support nonprofit organizations in fields ranging from education to social service to arts and beyond&quot;</td>
<td>IRS 990 data from 1985-1995 (2,359 orgs in balanced panel -25,949 observations)</td>
<td>total revenue; government grants and contracts</td>
<td></td>
<td>private donations</td>
</tr>
<tr>
<td>Fischer, Wilsker and Young (2011)</td>
<td>&quot;we hypothesize that the composition of revenues is a result of the nature of services provided—specifically whether services are public, private, or mixed in the nature of their benefits&quot;</td>
<td>2003 NCCS IRS Core Files (45,143)</td>
<td>Proportion of revenue from earned program revenues (payments by service users, government fees and contracts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kerlin and Pollak (2011)</td>
<td>whether there has been an increase in nonprofit commercial revenue and if so whether declines in government grants and private contributions were behind the rise.</td>
<td>IRS SOI files 1982-2002 (51,415)</td>
<td>commercial revenue (program service revenue, dues and assessments, income from special events, profit from sales of revenue)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 Operationalization of Earned Revenue - Examples of Dependent and/or Control Variables

The last grouping of authors to operationalize earned revenue do so tangentially; that is, the independent variable may contain some aspect of earned revenue. Kistruck, et al. (2013) use product diversification to explore the relationship between diversification and efficiency, so earned revenue activities are not the sole component of the independent
variable. Similarly, McDonald (2007) conducts a mixed-methods inquiry into the relationship between mission and innovation in which earned revenue activities are assessed on a shared-mission scale. The nature of the activities is independent variable, not the income stream itself. Another area in which earned revenue is a component of the independent variable is that of revenue diversification. Authors studying this (Chang and Tuckman 1994; Carroll and Slater 2009; Young, et al. 2010) create an index variable of all income streams, including earned revenue to assess the stability of an organization’s financial resources. Assuming financial security is a prerequisite for service delivery, this represents one linkage between earned revenue and charitable mission, but does not solely focus on any one type of activity (i.e.: earned revenue).

Limitations on what is known

As the previous section demonstrates, scholars have been conceptually exploring the link between earned revenue and charitable mission, but empirically testing this link has presented challenges. To the extent studies have been carried out, the literature is mixed as to whether earned revenue does, indeed, complement or become a substitute for service delivery. Early attempts to link earned revenue and service delivery are hampered by issues with the available data. Issues include availability, quality/accuracy, econometric measures, and timing. Availability on a macro level includes access to the big data sets, such as the IRS 990 sets put out by the NCCS. Availability on a micro level includes the variables measured. The IRS 990 forms include a lot of financial data, including program service revenue and program spending, but do not actually ask organizations to report non-financial program-level outcomes, hampering the establishment of a link between earned income and mission achievement.
Even when data is available, the presented analyses assume certain relationships between revenues and expenditures. As Hughes and Luksetich (2004) note, their measures assume contemporaneous timing between funding and expenditures, whereas, for many nonprofit organizations, funding lags behind spending. In addition, by making program expenses or program expense ratios the dependent variable, studies assume this is influenced by funding sources. However, the assumption of directionality may be flawed, and program spending may in fact affect funding, making the latter the dependent variable.

In addition to issues with the variables, Keating and Frumkin (2003) identify issues with the nature of the reporting, including variation in accounting systems, disclosure requirements, and oversight to which nonprofits may be subjected. The IRS 990 databases suffer what Abramson calls “problems of completeness”, since they do not cover smaller agencies (those with less than $25,000 in revenue or religious organizations, and rely on self-reporting so the data may be entered inaccurately. In their examination of revenue interactions, Tinkelman and Neely (2011) identify econometric issues with the IRS data, as well. They find the samples they used in there analyses to be sensitive to minor changes in the sample introduced to control for heteroskedasticity and outlying observations.
MY CONTRIBUTION TO THIS LITERATURE

The goal of this dissertation is to address some of the limitations of previous studies by introducing a typology linking earned revenue activities to mission activities, and using a relatively new data source that expands the financial measures available and provides more robust context for revenue activities. I propose to address previous shortcomings and enhance understanding of connection between revenue and mission by using data that includes information on both revenue variables and program level outputs. In doing so, I will introduce measures more directly linking earned revenue to mission. Alter (2004) offers guidance for this examination in her typology of social enterprises, in which she uses mission orientation, business/program integration, target markets, and operational models to examine how organizations combine social values and business practices. Specifically, this paper builds from Alter’s typology to consider the extent to which different sources of earned income are embedded with the mission of the organization on two dimensions: 1) the organizational technology each uses to produce outputs; and 2) the markets each target.

Organizational technology refers to organizational resources, human resources, and technology systems used to produce products or render services (Damanpour and Evan 1984), transforming inputs into outputs (Scott 1975). According to Kimberly and Evanisko (1981), this technology is directly related to the basic work activity of an organization. These include financial requirements, managerial expertise, and production capabilities (Lovelock 2004). Using the same organizational technology to produce core and earned income activities reflects integration and coordination (Gonzalez et al. 2002).
Target markets refer to the audience(s) to whom the activity in question targets or seeks to benefit. Organizations in the for-profit sector selling a good or service for revenue need to attract paying customers. Typically, the beneficiaries of mission-driven services are considered clients. These clients tend to come to the nonprofit, and the organization responds to the needs of these clients (Alter 2004). Complicating the identification of a nonprofit’s target market is the fact that for these organizations, the market for clients and the market for resources are often separate (Padanyi and Gainer 2004). Resources can come from clients who pay fees for service, in which case, target markets overlap because the customer of the earned revenue service is also the mission-driven service’s client. In this sense, nonprofits that have a dual market orientation meet the needs of both clients and customers. However, resources can also come from private donors, corporate sponsors, and government contributors. As Padanyi and Gainer (2004) demonstrate in their study of 158 nonprofits, this creates multiple constituencies requiring different organizational marketing strategies and techniques.

Another way to think about embeddedness on the target market dimension is to consider the excludability of the earned income activity to the target population. Excludability is the extent to which consumption of the earned revenue-generating good or service is contingent on the consumption of the mission service (Weimer and Vining 2005). If a customer has to partake of the mission-driven service in order to also consume the earned income good or service, the earned income activity can be considered fully embedded on the target market dimension.

One can therefore consider the embeddedness of the organization on the two dimensions of technology and target market. Meyer and Rowan’s discussion (1977) of
tight and loose coupling offers insights here (Cooney 2006). An earned revenue activity that uses the same organizational resources and targets the same audience as the mission activity is thought to be tightly coupled, or fully embedded. Organizations pursuing embedded earned revenue are charging for what they already do, finding ways to sustain themselves by carrying out their core mission. For example, an improv theater company selling tickets to its shows is pursuing embedded earned revenue. The revenue activity is, essentially, the mission-driven service. A customer cannot consume the revenue activity without also partaking of the mission-driven service. By engaging in this type of activity, the theater can capitalize on existing resources and relationships, minimizing reliance on external resources, and sustain its core mission activities by doing its core mission activities.

Market activities that share no commonalities in organizational resources or target markets with mission activities are loosely coupled, or external. An improv theater offering valet parking to the general public would be engaging in an external activity because the activity is not part of its core, does not use the same organizational technology to deliver this parking service, and does not exclude non-ticket-holding clients from consuming the service. Revenue activity that either uses the same technologies or targets the same markets, overlapping on one dimension, but not both, can be considered integrated. An improv theater offering using its inputs (actors, set designers, facilities) to offer a dramatic play in an attempt to broaden its audience would be offering an activity integrated on the organizational technology dimension. An improv theater offering offsite teambuilding workshops or comedy exercises in corporate
settings to its regular patrons would be engaging in a revenue activity integrated on the market dimension. Figure 2 demonstrates the two dimensions of embeddedness.

<table>
<thead>
<tr>
<th>TARGET MARKET</th>
<th>INTEGRATED Revenue</th>
<th>EXTERNAL Revenue</th>
<th>EMBEDDED Revenue</th>
<th>INTEGRATED Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2 The Embeddedness Matrix
A Note on the Arts and Culture as the Sub-Sector Focus:

As has been noted, nonprofits tend to pursue earned revenue for two reasons: increasing net revenues, and/or contributing to charitable mission. I will use the embeddedness typology linking earned revenue activities to program-level outputs in order to further explore the connection between earned revenue and mission. The data I use focus specifically on arts and culture organizations, for the following reasons: the dependence of this subsector on both earned revenue and charitable donations, the variations in the types of earned revenue activities, and the overlap between clients, customers and donors.

Earned revenue accounts for over 70% of all income in the nonprofit sector, but different types of organizations show varying levels of reliance on this income stream. Organizations that offer benefits that are private in nature tend to rely more on earned revenue (Wilsker and Young 2010). As Fischer et al. 2011, demonstrate, arts and culture organizations offer this type of benefit and this subsector tends to be the most reliant on earned revenue, though they are dependent on donations as well. However, after earned revenue donations account for the second-largest source of income for arts and culture organizations, making this subsector an ideal context in which to explore the relationship between earned revenue and charitable mission.

In addition to diverse revenue streams, another consideration is variation in the types of opportunities organizations may have to monetize their activities. Arts and culture organizations serve many missions, such as free or reduced access to art, art education, and cultural preservation. An organization focused on cultural preservation, for example, has an opportunity to charge for admission while still staying true to its
mission. The presence of different missions within this subsector should mean there will be variation in the earned revenue activities an organization chooses to adopt.

Lastly, in the arts and culture subsector, donor, client, and customer circles tend to overlap. Typically, the client the organization seeks as a paying customer is also targeted to be a donor. People setting strategies, such as members of the board of directors, also consume the service. This contrasts with a human services agency like a food pantry, where the board members who set strategy are not necessarily clients, and clients are not necessarily (if ever) paying clients. Taken together, the sub-sector’s reliance on earned revenue as well as private donations, the opportunities for different types of earned revenue activities, and the overlap in markets for service delivery offer an ideal ground in which to explore the connection between earned revenue and charitable mission.

**DISSERTATION ORGANIZATION**

This dissertation is laid out as follows. Chapter 2 provides a descriptive comparison between the IRS data and Cultural Data Project data, using 2007 as a test year. I demonstrate the advantages and disadvantages each data set presents: Core Files for all organizations, Core Files for arts and culture organizations, SOI files for all organizations, SOI files for all organizations, and revenue picture vis-à-vis the Cultural Data Project data. Chapter 3 examines the impact of earned revenue on the first measure of charitable mission: donated income. Chapter 4 examines the impact of earned revenue on the second measure of charitable mission: service level outcomes. Lastly, chapter 5 presents general conclusions from this study, limitations, and next steps for future research.
Chapter 2: Comparing the Available Data

Scholars have been conceptually exploring the link between earned revenue and charitable mission, but empirically testing this link has presented challenges. To the extent studies have been carried out, the literature is mixed as to whether earned revenue does, indeed, complement or become a substitute for mission-related activities. Early attempts to link earned revenue and charitable mission are hampered by issues with the available data. Issues include availability, quality/accuracy, econometric measures, and timing.

The primary sources that authors have used to examine earned revenue are the IRS 990 Forms that nonprofit organizations are required to file. The National Center for Charitable Statistics (NCCS) makes available a number of different databases of IRS information. These databases range in breadth (number of organizations included) and breadth (number of variables included for each organization). In this chapter, I will provide an overview of earned revenue in the nonprofit sector according to two of the NCCS databases, and contrast these pictures with that from the Cultural Data Project’s (CDP) database which draws from organizations’ own audits and end-of-year reports. The goal is twofold: to demonstrate the different conclusions one can draw using a particular dataset, and to set the stage for the analyses that follow in chapters 3 and 4, using the CDP data.
The Revenue Picture According to the IRS Form 990

The NCCS offers a number of data files that include digitized Form 990 returns that nonprofit organizations file with the Internal Revenue Service (IRS). These files vary in terms of how many observations they include, as well as how many variables. To demonstrate some of the variation in the files, I will show what the income picture looks like in 2007\(^4\) based on the Core Financial File and the Statistics of Income (SOI) sample file.

The Core File contains information from 501(c)3 organizations required to file Form 990s, 990 EZs, and Form 990-PFs. The files contain over 100 variables, of which approximately 60 are financial in nature. The breadth of the sample is useful for getting an overview of the nonprofit sector; however, the information presented is limited. For example, some of the revenue variables such as contribution data are reported in aggregate rather than separate streams.

By contrast, the SOI file has a random sample of large charities as well as a random sample of smaller organizations stratified and weighted by assets level. This file reports over 300 financial variables from a random sample of organizations reporting at least $25,000 in gross receipts. The financial reporting goes into much greater detail than the Core files, and includes individual, disaggregated contribution and investment streams and other information not recorded in the Core files. Table 4 shows a comparison of the revenue data available in the IRS Core 2007 file and the IRS SOI 2007 file.

\(^4\) I chose 2007 for two key reasons: changes to the IRS Form, and the timeframe used in subsequent papers in this dissertation. The IRS Form 990 merged key fields after 2007, including Medicare reporting, that skews some program service revenue variables. Also, I use data from 2007-2010 in chapters 3 and 4 of this work, making 2007 the preferable comparison year for showing various revenue pictures.
<table>
<thead>
<tr>
<th>2007</th>
<th>NCCS IRS Core</th>
<th>NCCS IRS SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>gross receipts of at least $50,000</td>
<td>all large charities plus a random sample of smaller organizations stratified and weighted by assets level</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>344,875</td>
<td>15,397</td>
</tr>
<tr>
<td><strong>Variables</strong></td>
<td>124</td>
<td>344</td>
</tr>
</tbody>
</table>

### Earned Revenue

<table>
<thead>
<tr>
<th></th>
<th>NCCS IRS Core</th>
<th>NCCS IRS SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Service Revenue</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>UBI Revenue</strong></td>
<td>No</td>
<td>Yes, in parts; folded in to calculated total</td>
</tr>
<tr>
<td><strong>Membership Dues</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Rent</strong></td>
<td>No</td>
<td>Yes - real estate and personal property in analysis (Part VII), reported in aggregate in Part I)</td>
</tr>
<tr>
<td><strong>Sales of Other Assets</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Special Events/Gaming</strong></td>
<td>Yes, aggregate</td>
<td>Yes, separate reporting totals</td>
</tr>
<tr>
<td><strong>Sales of Inventory</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Contributions/Grant Income

<table>
<thead>
<tr>
<th></th>
<th>NCCS IRS Core</th>
<th>NCCS IRS SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contributions to Donor Advised Funds</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Direct Public Support</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Indirect Public Support</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Government Contributions</strong></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Investment Income

<table>
<thead>
<tr>
<th></th>
<th>NCCS IRS Core</th>
<th>NCCS IRS SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest on Savings/Temporary Cash Investments</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Dividends/Interest from securities</strong></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>Other Investment Income</strong></td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Other Income

<table>
<thead>
<tr>
<th></th>
<th>NCCS IRS Core</th>
<th>NCCS IRS SOI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other Revenue</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 4 Comparison of Available Revenue Data in NCCS IRS Core and IRS SOI Files, 2007
Revenue in 2007: IRS Core Files

As Table 5 demonstrates, the IRS Core 2007 File contains information in 344,872 organizations. Human services organizations account for one third of these organizations (33.74%), followed by education (18.11%) and health (12.32%). At 10.99%, arts organizations make up the fifth-largest subsector of observations in this sample. The key revenue variables available are earned revenue, contributions, investment income, and other income.

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Culture, and Humanities</td>
<td>37,889</td>
<td>10.99%</td>
</tr>
<tr>
<td>Education</td>
<td>62,465</td>
<td>18.11%</td>
</tr>
<tr>
<td>Environment and Animals</td>
<td>14,658</td>
<td>4.25%</td>
</tr>
<tr>
<td>Health</td>
<td>42,486</td>
<td>12.32%</td>
</tr>
<tr>
<td>Human Services</td>
<td>116,355</td>
<td>33.74%</td>
</tr>
<tr>
<td>International, Foreign Affairs</td>
<td>6,836</td>
<td>1.98%</td>
</tr>
<tr>
<td>Public, Societal Benefit</td>
<td>40,152</td>
<td>11.64%</td>
</tr>
<tr>
<td>Religion Related</td>
<td>22,894</td>
<td>6.64%</td>
</tr>
<tr>
<td>Mutual/Membership Benefit</td>
<td>852</td>
<td>0.25%</td>
</tr>
<tr>
<td>Unknown, Unclassified</td>
<td>285</td>
<td>0.08%</td>
</tr>
<tr>
<td>Total</td>
<td>344,872</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5 Organizations in 2007 IRS Core File, by Subsector Type

Within the sample of all organizations, almost half (49.77%) report program service revenue. The mean value of this revenue stream is $5,569,650, and accounts for over half of total revenues. The majority of organizations (83.87%) report at least some contributions and grants. For these organizations, contributions and grants account for 62.6% of total revenue, with a mean of $1,132,257. Table 6 shows the revenue trends for
the nonprofit sector as a whole, based on the 2007 IRS Core File. In addition, Tables 25-27 in Appendix A provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).

<table>
<thead>
<tr>
<th>Revenue Overview 2007 (n=344,883)</th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean (for orgs with rev type)</th>
<th>% of Total Revenue Stream (for organizations reporting income)</th>
<th>% of Total Revenue Stream (for all organizations in sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>73.54%</td>
<td>3889397.00</td>
<td>57.98%</td>
<td>39.40%</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>49.77%</td>
<td>2771932.00</td>
<td>54.20%</td>
<td>26.99%</td>
</tr>
<tr>
<td>Dues</td>
<td>22.18%</td>
<td>27960.00</td>
<td>22.05%</td>
<td>4.89%</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>11.54%</td>
<td>17867.36</td>
<td>17.85%</td>
<td>2.16%</td>
</tr>
<tr>
<td>Rental Income</td>
<td>7.17%</td>
<td>7922.11</td>
<td>7.91%</td>
<td>0.62%</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>4.41%</td>
<td>20065.27</td>
<td>14.19%</td>
<td>0.65%</td>
</tr>
<tr>
<td>Special Events</td>
<td>28.72%</td>
<td>12568.11</td>
<td>27.52%</td>
<td>4.09%</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>83.87%</td>
<td>949585.60</td>
<td>62.59%</td>
<td>52.50%</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>70.95%</td>
<td>137904.70</td>
<td>6.16%</td>
<td>4.37%</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>9.70%</td>
<td>162561.00</td>
<td>19.14%</td>
<td>1.73%</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>28.89%</td>
<td>64532.64</td>
<td>6.98%</td>
<td>2.00%</td>
</tr>
</tbody>
</table>

Table 6 Revenue Overview for All 501(c)3 Organizations in the IRS 2007 Core File

An examination of revenue trends specific to the arts and culture subsector reveals these 37,889 organizations show a heavier reliance on program service revenue than the sector as a whole. Over 62% of arts and culture organizations report this revenue type, with an average mean of $357,369. Program service revenue accounts for an average of 43.54% of all revenues. A larger percentage of arts and culture organizations (92.26%)
report contributions and grants than the whole sector, as well, with this income type accounting for 47.51% of total revenues. Table 7 shows the revenue trends for the arts and culture subsector, based on the 2007 IRS S File. In addition, Tables 28-30 in Appendix A provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).

### Table 7 Revenue Overview for Arts and Culture 501(c)3 Organizations in the IRS 2007 Core File

<table>
<thead>
<tr>
<th>Revenue Overview 2007 (n=37,889)</th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean in $ (for orgs with rev type)</th>
<th>% of Total Revenue Stream (for organizations reporting income)</th>
<th>% of Total Revenue Stream (for all organizations in sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>83.80%</td>
<td>360188.50</td>
<td>50.70%</td>
<td>48.54%</td>
</tr>
<tr>
<td><strong>Total Program Service Revenue</strong></td>
<td>62.65%</td>
<td>223824.90</td>
<td>43.54%</td>
<td>27.31%</td>
</tr>
<tr>
<td>Dues</td>
<td>38.43%</td>
<td>30247.30</td>
<td>7.62%</td>
<td>2.93%</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>22.41%</td>
<td>22653.69</td>
<td>10.22%</td>
<td>3.55%</td>
</tr>
<tr>
<td>Rental Income</td>
<td>10.00%</td>
<td>4296.74</td>
<td>7.34%</td>
<td>0.62%</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>3.60%</td>
<td>8885.52</td>
<td>19.53%</td>
<td>0.68%</td>
</tr>
<tr>
<td>Special Events</td>
<td>32.15%</td>
<td>10462.93</td>
<td>18.97%</td>
<td>13.45%</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>92.26%</td>
<td>487623.00</td>
<td>47.51%</td>
<td>43.84%</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>70.64%</td>
<td>45134.49</td>
<td>6.12%</td>
<td>4.31%</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>8.26%</td>
<td>51516.46</td>
<td>14.69%</td>
<td>1.14%</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>31.12%</td>
<td>18787.58</td>
<td>7.13%</td>
<td>2.17%</td>
</tr>
</tbody>
</table>

Table 7 Revenue Overview for Arts and Culture 501(c)3 Organizations in the IRS 2007 Core File

### Revenue in 2007: IRS SOI Files

As Table 8 demonstrates, the IRS 2007 SOI file includes information on 15,397 organizations in the nonprofit sector. Health (28.11%), human services (26.74%), and education (20.82%) organizations once again make up the top three subsectors represented, with arts and culture organizations representing 6.74% of the sample. The
2007 SOI file includes separate lines for various activities generating program service revenue, and also separates out Medicare payments from other government contributions (as opposed to lumping all government grants together in one line in subsequent years).

In addition, the SOI file includes UBIT information, which is not present in the Core file. However, it should be noted the UBIT information is presented in component parts in Part VII (i.e.: UBIT portion of rental income), and rolled into revenue totals for reporting purposes in Part I and Part VII of the IRS 990 form.

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, Culture, and Humanities</td>
<td>1,037</td>
<td>6.74%</td>
</tr>
<tr>
<td>Education</td>
<td>3,205</td>
<td>20.82%</td>
</tr>
<tr>
<td>Environment and Animals</td>
<td>431</td>
<td>2.80%</td>
</tr>
<tr>
<td>Health</td>
<td>4,328</td>
<td>28.11%</td>
</tr>
<tr>
<td>Human Services</td>
<td>4,117</td>
<td>26.74%</td>
</tr>
<tr>
<td>International, Foreign Affairs</td>
<td>266</td>
<td>1.73%</td>
</tr>
<tr>
<td>Public, Societal Benefit</td>
<td>1,578</td>
<td>10.25%</td>
</tr>
<tr>
<td>Religion Related</td>
<td>352</td>
<td>2.29%</td>
</tr>
<tr>
<td>Mutual/Membership Benefit</td>
<td>83</td>
<td>0.54%</td>
</tr>
<tr>
<td>Total</td>
<td>15,397</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 8 Organizations in 2007 IRS SOI File, by Subsector Type

The IRS SOI file presents a revenue picture that is quite different than that conveyed by Core file, which aligns with the fact the SOI file skews toward larger organizations reporting at least $25,000 in revenue. Almost three quarters (74.31%) of all organizations in the in the SOI file reported program service revenue, as compared to the 49% that reported this stream in the Core. Program service revenue accounts for
almost 63% of total revenue streams. While 95% of all organizations report
collection/grant income of some sort, a similar proportion to that of the Core file, this
revenue stream accounts for less than 40% of total revenues, as compared to over 54% as
recorded in the Core file. Table 9 shows the revenue trends for the nonprofit sector as a
whole, based on the 2007 IRS SOI File. In addition, Tables 31-33 in Appendix B provide
the descriptive statistics for each measure (% of organizations reporting, mean for
reporting organizations, % of total revenue).

<table>
<thead>
<tr>
<th>Revenue Overview 2007 (n=15,397)</th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean in $ (for orgs with rev type)</th>
<th>% of Total Revenue Stream</th>
<th>% of Total Revenue Stream (for all organizations in sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>91.02%</td>
<td>61900000.00</td>
<td>62.36%</td>
<td>55.12%</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>74.31%</td>
<td>70700000.00</td>
<td>62.94%</td>
<td>46.77%</td>
</tr>
<tr>
<td>Dues</td>
<td>11.00%</td>
<td>2102632.00</td>
<td>16.58%</td>
<td>1.82%</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>12.79%</td>
<td>1822538.00</td>
<td>7.04%</td>
<td>0.86%</td>
</tr>
<tr>
<td>Rental Income</td>
<td>26.76%</td>
<td>523252.30</td>
<td>3.41%</td>
<td>0.60%</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>44.99%</td>
<td>7250635.00</td>
<td>12.95%</td>
<td>3.87%</td>
</tr>
<tr>
<td>Special Events</td>
<td>19.00%</td>
<td>239810.90</td>
<td>6.59%</td>
<td>1.19%</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>82.46%</td>
<td>12800000.00</td>
<td>36.70%</td>
<td>30.27%</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>3.41%</td>
<td>18300000.00</td>
<td>28.18%</td>
<td>0.96%</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>76.89%</td>
<td>7609392.00</td>
<td>29.97%</td>
<td>23.04%</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>22.45%</td>
<td>7252151.00</td>
<td>7.63%</td>
<td>1.71%</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>37.16%</td>
<td>11400000.00</td>
<td>21.64%</td>
<td>8.05%</td>
</tr>
<tr>
<td>Total Investment</td>
<td>93.67%</td>
<td>2629425.00</td>
<td>10.27%</td>
<td>9.35%</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
<td>69.68%</td>
<td>649492.40</td>
<td>3.24%</td>
<td>2.25%</td>
</tr>
<tr>
<td>Dividends/Interest from Securities</td>
<td>56.30%</td>
<td>2665959.00</td>
<td>12.09%</td>
<td>6.70%</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>13.35%</td>
<td>3948497.00</td>
<td>5.08%</td>
<td>0.40%</td>
</tr>
<tr>
<td>Other Income</td>
<td>55.87%</td>
<td>2122079.00</td>
<td>3.72%</td>
<td>1.77%</td>
</tr>
</tbody>
</table>

Table 9 Revenue Overview for All 501(c)3 Organizations in the IRS 2007 SOI File

28
An examination of revenue trends specific to the arts and culture subsector in the SOI file reveals these 1,037 organizations show a slightly higher reliance on program service revenue than the sector as a whole. Over 77% of arts and culture organizations report this revenue type, with an average mean of $4,053,795.00. Program service revenue accounts for an average of 28% of all revenues. A larger percentage of arts and culture organizations (94%) report contributions and grants than the whole sector, as well, with this income type accounting for 57% of total revenues. Table 10 shows the revenue trends for the arts and culture, based on the 2007 IRS SOI File. In addition, Tables 34-36 in Appendix B provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).
Given the nature of this sample, with its more robust revenue variables, the SOI file may present a revenue picture that is closer to what is happening in the field.

However, this data is still not ideal for assessing earned revenue, especially as it connects to charitable mission. Although there opportunities to report different components of service revenue, this data set does not include information on the nature of these activities. In addition, the focus on larger organizations can skew the reporting by having a few outliers (such as large nonprofit hospitals) in the dataset. This holds true for both the SOI and Core files. In general, the IRS Form 990 files include a lot of financial data,
including program service revenue and program spending. However, they do not actually ask organizations to report non-financial program-level outcomes, hampering the establishment of a link between earned income and mission achievement. The CDP attempts to address this gap through its own database of financial and programmatic data.

*The Revenue Picture According to the Cultural Data Project: A Focus on Arts and Culture*

The CDP collects from the organizations in its sample audits and/or year-end financial reports that follow the Generally Accepted Accounting Principles (GAAP) established by the Financial Accounting Standards Board (FASB). These reports are purported to be more robust than the information available from the IRS Form 990s because they can include contributed goods/services, allocation of joint costs across expense categories, and show distinction between restricted and unrestricted revenue and balance sheet items. Per the CDP, this information presents a more complete financial picture5, albeit restricted to the arts and culture subsector.

The CDP data includes 36 income variables. I have sorted them into three broad categories: earned revenue, contributed income, and investment income, and present an overview of revenue trends for the 2,115 organizations I use in my sample for chapters 3 and 4. Earned revenue comprises the following income activities: admissions, advertising, concessions, contracted performances, corporate sponsors, dues, gallery sales, parking, rent, royalties, shop sales, special events, media subscriptions, performance subscriptions, tickets, touring, tuitions, workshops, and other earned

income. Over 97% of all organizations in the sample report having some earned revenue, a higher proportion than those in either the IRS Core or SOI files. However, no individual activity accounts for more than 20% of total revenues. Table 11 provides an overview of the individual earned revenue streams. In addition, Tables 37-39 in Appendix C provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).

<table>
<thead>
<tr>
<th>Earned Revenue Overview 2007 (n=2115)</th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean in $</th>
<th>% of Total Revenue Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>16.64%</td>
<td>448,358.60</td>
<td>10.16%</td>
</tr>
<tr>
<td>Advertising</td>
<td>25.63%</td>
<td>34,334.27</td>
<td>3.07%</td>
</tr>
<tr>
<td>Concessions</td>
<td>22.22%</td>
<td>99,276.93</td>
<td>2.37%</td>
</tr>
<tr>
<td>Contracted Performances</td>
<td>34.00%</td>
<td>157,363.90</td>
<td>13.65%</td>
</tr>
<tr>
<td>Corporate Sponsors</td>
<td>15.23%</td>
<td>101,501.30</td>
<td>6.50%</td>
</tr>
<tr>
<td>Dues</td>
<td>35.32%</td>
<td>139,309.30</td>
<td>7.03%</td>
</tr>
<tr>
<td>Gallery</td>
<td>8.75%</td>
<td>36,076.30</td>
<td>5.39%</td>
</tr>
<tr>
<td>Other Earned Income</td>
<td>47.94%</td>
<td>205,211.60</td>
<td>4.27%</td>
</tr>
<tr>
<td>Parking</td>
<td>2.36%</td>
<td>255,006.80</td>
<td>1.62%</td>
</tr>
<tr>
<td>Rent</td>
<td>33.85%</td>
<td>136,433.40</td>
<td>6.28%</td>
</tr>
<tr>
<td>Royalties</td>
<td>0.05%</td>
<td>2,950.00</td>
<td>0.34%</td>
</tr>
<tr>
<td>Shop</td>
<td>45.11%</td>
<td>105,884.90</td>
<td>3.34%</td>
</tr>
<tr>
<td>Special Events</td>
<td>21.66%</td>
<td>94,561.72</td>
<td>5.53%</td>
</tr>
<tr>
<td>Subscription - Media</td>
<td>0.10%</td>
<td>14,367.00</td>
<td>0.19%</td>
</tr>
<tr>
<td>Subscription - Performance</td>
<td>18.44%</td>
<td>527,644.10</td>
<td>10.33%</td>
</tr>
<tr>
<td>Tickets</td>
<td>53.66%</td>
<td>362,374.00</td>
<td>17.97%</td>
</tr>
<tr>
<td>Touring</td>
<td>15.04%</td>
<td>167,978.30</td>
<td>11.31%</td>
</tr>
<tr>
<td>Tuitions</td>
<td>26.10%</td>
<td>531,329.00</td>
<td>19.30%</td>
</tr>
<tr>
<td>Workshops</td>
<td>26.62%</td>
<td>49,518.10</td>
<td>4.87%</td>
</tr>
</tbody>
</table>

Table 11 Earned Revenue Overview for Arts and Culture Organizations in the CDP File, 2007
The IRS SOI file includes 4 contribution variables. By contrast, the CDP data includes 14 sources, 13 of which are included in my analyses\(^6\): individual (non-board members), board members, corporate, city, county, state, federal, in-kind, parent organization, related organization, special events, and other contributed income. While 94% of the organizations in the SOI file reported some contributed income, over 99% report contributed income according to the CDP. The most heavily reported sources include contributions from individuals, boards, foundations, and state contributions. However, for the 5% of organizations reporting parent-organization contributions, this support accounts for 42% of total revenue. The rest of the contribution sources account for 5.3%-12.6% of total revenue. Table 12 provides an overview of the each contributed income stream. In addition, Tables 40-42 in Appendix C provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).

\(^6\) The CDP asks about tribal income, but this was marginal or nonexistent for most organizations. As discussed in chapters 3 and 4, the variable was also not statistically significant, and has been dropped from the trend analysis and models in this dissertation.
## Contribution Income Overview, 2007 (n=2115)

<table>
<thead>
<tr>
<th></th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean in $</th>
<th>% of Total Revenue Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>75.51%</td>
<td>258,305.80</td>
<td>5.33%</td>
</tr>
<tr>
<td>City</td>
<td>51.21%</td>
<td>109,751.00</td>
<td>8.32%</td>
</tr>
<tr>
<td>Corporate</td>
<td>68.51%</td>
<td>129,019.40</td>
<td>5.31%</td>
</tr>
<tr>
<td>County</td>
<td>30.35%</td>
<td>181,247.50</td>
<td>6.80%</td>
</tr>
<tr>
<td>Federal</td>
<td>23.97%</td>
<td>135,108.70</td>
<td>5.24%</td>
</tr>
<tr>
<td>Foundation</td>
<td>82.17%</td>
<td>376,797.20</td>
<td>17.07%</td>
</tr>
<tr>
<td>Individual</td>
<td>91.77%</td>
<td>353,683.70</td>
<td>11.74%</td>
</tr>
<tr>
<td>In-Kind</td>
<td>43.78%</td>
<td>111,311.40</td>
<td>12.60%</td>
</tr>
<tr>
<td>Parent Org.</td>
<td>5.39%</td>
<td>450,791.80</td>
<td>42.25%</td>
</tr>
<tr>
<td>Related Org.</td>
<td>0.19%</td>
<td>59,284.50</td>
<td>7.11%</td>
</tr>
<tr>
<td>Special Events</td>
<td>48.32%</td>
<td>141,151.30</td>
<td>8.71%</td>
</tr>
<tr>
<td>State</td>
<td>62.03%</td>
<td>128,795.80</td>
<td>7.37%</td>
</tr>
<tr>
<td>Other</td>
<td>17.26%</td>
<td>317,144.10</td>
<td>6.57%</td>
</tr>
</tbody>
</table>

Table 12 Contribution Overview for Arts and Culture Organizations in the CDP File, 2007

The information regarding investment activities available in the CDP data is most similar to that available in the IRS 990 files, at least in terms of variables included. The CDP presents three categories: interest and dividends, investments - realized gains/losses, and investments - unrealized gains/losses. According to the SOI File, 60% of all arts organizations reported income from interest, which accounted for an average of 3% of total revenue. These figures are slightly lower in the CDP files - 65% report revenue from this, accounting for 2.4% of total revenue. Table 13 provides an overview of each investment income stream. In addition, Tables 43-45 in Appendix C provide the descriptive statistics for each measure (% of organizations reporting, mean for reporting organizations, % of total revenue).
<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>% Reporting This Type of Revenue</th>
<th>Revenue Mean in $</th>
<th>% of Total Revenue Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>65.01%</td>
<td>161,889.60</td>
<td>2.41%</td>
</tr>
<tr>
<td>Realized Investment</td>
<td>17.87%</td>
<td>923,222.20</td>
<td>5.70%</td>
</tr>
<tr>
<td>Unrealized Investment</td>
<td>18.01%</td>
<td>1,554,651.00</td>
<td>8.41%</td>
</tr>
</tbody>
</table>

Table 13 Investment Income Overview for Arts and Culture Organizations in the CDP File, 2007

Conclusion

Scholars have been conceptually exploring the link between earned revenue and charitable mission, but empirically testing this link has presented challenges. Early attempts to do so relied primarily on data available from the IRS Form 990 series. However, as this paper demonstrates, the choice of IRS files might have led to different conclusions based on the information available. The Core file presents breadth, with information on all organizations required to file with the IRS, but does not contain many detailed financial variables. The SOI file offers breadth, but skews toward larger organizations. In addition, neither file contains programmatic information regarding the consumption of goods or services.

By contrast, the data available through the Cultural Data Project balances depth and breadth by including 36 income variables from thousands of arts and culture organizations. The level of detail allows for initial analysis of each revenue stream as it relates to organizational mission, and a more complete understanding of earned revenue in the arts and culture subsector.
Chapter 3: The Connection Between Mission And Market: Does Earned Revenue Crowd Out or Crowd In Donor Dollars?

**INTRODUCTION**

Earned revenue makes up a substantial portion of income to nonprofit organizations. However, 501c(3) nonprofit organizations are in part defined by their unique position as charitable organizations, capable of receiving tax-deductible charitable contributions and serving as a repositories of public trust through the contribution of donor dollars (Bekkers 2003; James 2003). How does earned income affect charitable mission? Does earned income crowd out private contributions? Or, are donors more likely to give to an organization that has proven its ability to raise earned revenue? To help answer these questions, this chapter explores the relationship between earned revenue and the aspect of charitable mission represented by donated income. Some findings suggest donations are vulnerable to other income streams. That is, as nonprofit organizations bring in income from non-donation-related sources, donated income decreases. Other studies find donations are positively associated with other income streams, increasing as organizations bring in non-donor-based dollars.

However, to date, the majority of the previous literature has focused on the how direct government actions like grants (Abrams and Schitz 1978; Payne 1998; Andreoni and Payne 2003; Stone, Hager, and Griffin 2001) and indirect government actions like tax policies (Clotfelter and Salamon 1982) affect donor preferences and behaviors. To the
extent the scholars have focused on the relationship between earned income and donations, they have found mixed results. Some have found earned revenue displaces, or crowds out, donor dollars (Kingma 1995; B. Guo 2006; Yetman and Yetman 2003; McKay et. al 2013). Others have found earned revenue to be a complement to, or crowd in, donated income (Posnett and Sandler 1989; Wicker, Breuer and Hennigs 2012).

These mixed results may result from two factors: donor motivation for giving, and the fact that earned revenue tends to be studied as an aggregate measure of program or commercial revenues. People donating to charity may be motivated by private benefits, public benefits or a bit of both. Private benefits include tax breaks, prestige, or “the warm glow” of giving (Andreoni 1990; Harbaugh, Mayr, & Burghart 2007) and accrue to the individual donor even as the charitable organization realizes the benefits of donations. An individual must make a contribution to realize a private benefit. On the other hand, public benefit motivations suggest that individuals give towards a public cause such as improving an organization’s capacity to help the community and see to the well-being of its clients (Warr 1982; Roberts 1984). Donors motivated by public benefit give to further an external cause rather than for intrinsic benefit; thus, if they sense that the cause is being met in some other way, they may not have to give individually to realize the benefit.

Crowd-out might be expected between earned revenue and donated income if donors are giving to realize public benefits, because the prospective recipient organizations would be getting the resources needed from earned revenue activities to deliver on their charitable missions. However, not all earned revenue may affect donated income in the same way. Some market-based activities are embedded within the
organization’s core mission-driven activities, defined here as earned income activities that use the same organizational resources, and target the same markets as the core mission driven activity (Alter 2004, Cooney 2006). These activities may crowd out donor income because customers already paying for the service (i.e.: a museum admission) may not be further inclined to support the organization with a donation.

Other market-based activities can be defined as external to the core mission activities, using separate organizational technologies, and targeting different markets. By introducing its mission to new markets through new services and/or products, the organization may see a crowding-in effect as customers who do not already perceive themselves to be supplementing the mission may be inclined to donate in order to do so.

A third class of revenue activities can be defined as integrated within the organization, either using sharing organizational technologies, or targeting the same markets as the core mission-driven services. The effect these activities will have on donated income is unknown. On the one hand, donors might perceive integrated activities that use the same organizational technologies to have the same supplemental effect as fully embedded activities - i.e.: by paying for the integrated good or service, they are already supporting the mission, and do not need to donate. They could also perceive the use of existing technologies to serve different target markets as a distraction from the mission, lessoning the public benefit of the organization and also being a turn-off to donations. On the other hand, potential supporters from outside traditional markets may be drawn to the organization through unconventional, non-core-related activities, leading to a crowding-in effect of earned revenue and donations. This study attempts to explore the nature of the relationship between earned revenue and donated income, and
specifically the potential importance of the level of embeddedness of earned revenue on donated income.

Using data from the Cultural Data Project, which collects financial and program information from arts and culture organizations in 12 states, I analyze financial and program information from 2,000 organizations over a period of four years to determine the effects of earned income changes in earned revenue on donated income. Findings suggest that not all earned revenue activities affect donated income in the same way, and embeddedness matters. Most types of earned income, including fully embedded activities and integrated activities, are negatively related to donated income, suggesting crowding-out effects. However, while earned revenue activities that are integrated on the technology dimension are also negatively related to donated income, earned revenue integrated on the target market dimension are positively related, suggesting a possible crowding in effect when core customers are offered new products or services. This study is limited to the arts and culture subsector, which is unique in its heavy reliance on both earned revenue and donated income relative to other types of nonprofits such as social service agencies, and also has overlap between targeted clients, paying customers, and donors.

The rest of this paper is organized as follows. The next section lays out the theories of revenue diversification and expected crowding in/crowding out effects on donated income. Section three introduces the variables and model. Results are presented in section 4. The last two sections include further discussion, conclusions, and next steps for future research.
The nonprofit sector is sometimes referred to as the “philanthropic sector,” acknowledging the unique position of nonprofit organizations to attract income from private donations rather than taxes as in the government sector or earned revenue as in the for-profit sector (Bergstrom et al. 1986; Versterlund 2006). Indeed, attracting income from private donations is a way of demonstrating public support for an organization. To the extent that stakeholders are willing to make donations to a given organization, they signal their support for the organization’s mission and activities. This philanthropic support is a defining feature of nonprofit organizations, allowing for the satisfaction of heterogeneous interests in a democratic, free-market society (Salamon 1994; Salamon & Anheier 1998; Frumkin 2005).

However, while a defining feature of nonprofit organizations, revenue from private donations is on average a small piece of the total income for nonprofit organizations. In 2010, donated income made up only 13.3% of all revenue for publically reporting charities (Blackwood et al. 2012). As has been the case for decades, earned revenue is the dominate source of income for nonprofit organizations. Publically reporting organizations received, on average, 49.6% of their revenue from fees from private sources for goods and services, with an additional 23.9% coming from fees paid by government sources (Blackwood et al. 2012). Additionally, nonprofit organizations are increasingly encouraged to pursue earned revenue to increase their self-sufficiency and reduce their dependence on private donations and government grants (Chang and Tuckman 1994; Dees and Anderson 2003; Carroll and Slater 2009). Some have expressed concern that a movement away from philanthropic support towards earned income could
negatively impact the public mission of the nonprofit sector (Eikenberry and Kluver 2004). Whether positive (self-sufficiency) or negative (mission creep), the extent to which an increase in earned revenue will be associated with a decrease in private donations is largely unknown.

The literature on the crowding out effects of government funding and private donations offers some guidance regarding this relationship, as does a small but growing field of literature regarding earned income and government, and earned income and donations. However, this literature is only informative to the extent people’s giving motivations are understood. People donating to charity may give to realize private benefits, such as tax breaks prestige, or the sense of agency known as “warm glow” (Andreoni 1990; Harbaugh, Mayr, & Burghart 2007); or to realize public benefits such as improving an organization’s capacity to help the community and see to the well-being of its clients (Warr 1982; Roberts 1984); or a bit of both.

Crowd-out might be expected between earned revenue and donated income to the extent that donors are giving to realize public benefits, because the prospective recipient organizations would be getting the resources needed from earned revenue activities to deliver core services. To the extent that donors give to realize private benefits, especially the intangible warm glow, however, crowding out should not occur. Regardless of whether a nonprofit organization receives additional funds from, for example, a government source, an individual would still have to donate in order to get a tax benefit, or to feel the warm glow of internal satisfaction associated with giving.

However, the crowd-out literature does not tell a consistent story. Tinkelman’s table in the Handbook of Research on Nonprofit Economics and Management (2010)
demonstrates the mixed results of more than 60 articles that looked at the interaction between government and donated funds, plotting the mixed findings along a continuum ranging from crowd-out effects greater than 50% to crowd-in effects greater than 50%. For example, using Form 990 data, Okten and Weisbrod (2000) find no evidence of crowding-out, and see positive effects in some nonprofit subsectors. In his study of nonprofit arts organizations, Smith (2007) finds crowding-in effects ranging from $0.14 to $1.15 for every dollar increase in government income. This may Government funding may serve as a sign of organizational trustworthiness. This inconsistent story makes sense to the extent donors may be motivated by less-than-altruistic means.

The literature discussing crowding-in and crowding-out effects between government funds and donated income draws mixed conclusions, and the empirical literature that does exist regarding earned income and donations presents a similarly mixed picture. Kingma’s 1995 study of 511 Red Cross chapters saw the greatest crowding-out effect, in which an increase of $1 of earned income was associated with a decrease in donations of $3.59. Using path modeling, B. Guo (2006) also theorized crowding out effects between earned and donated income. This crowding-out could be a reflection of donors realizing public benefits, i.e.: the mission is being supported by means other than donations.

Other scholars have found the opposite to be true, however. Posnett and Sandler (1989) found no evidence that any alternative sources of revenue – grants, legacies, autonomous income such as earned revenue – crowded out donations. Using the National Center of Charitable Statistics’ Statistics of Income files from 1982-2002, Kerlin and Pollak (2011) found that, while the nonprofit sector as a whole saw crowd-out effects
between earned revenue and donated income, the opposite was true in arts and culture organizations, where increases in private donations were in excess of commercial revenue. This finding could be due to the fact that donors are attracted to the idea of organizations being able to take their dollars and stretch them by matching funds from supplemental activities.

In addition to non-uniform donor motivations, part of the reason for the mixed findings may have to do with how earned revenue has been operationalized in prior literature, as an aggregate measure – i.e.: commercial or program service revenue on the IRS forms (e.g.: Hughes and Luksetich 1999; Yetman and Yetman 2003; Smith 2007). However, different earned revenue activities may not uniformly affect donated income in the same way. The motivations people have for giving – public benefit v. private benefit – may mean that the nature of the earned revenue matters when it comes to whether or not earned revenue crowds out donations. This paper attempts to address this gap by examining the relationship between earned revenue activities, charitable, and donated income. Alter (2004) offers guidance for this examination in her typology of social enterprises, in which she uses mission orientation, business/program integration, target markets, and operational models to examine how organizations combine social values and business practices. Specifically, this paper builds from Alter’s typology to consider the extent to which different sources of earned income are embedded with the mission of the organization on two dimensions: 1) the organizational technology each uses to produce outputs; and 2) the markets each target.

*Organizational technology* refers to organizational resources, human resources, and technology systems used to produce products or render services (Damanpour and
Evan 1984), transforming inputs into outputs (Scott 1975). According to Kimberly and Evanisko (1981), this technology is directly related to the basic work activity of an organization. These include financial requirements, managerial expertise, and production capabilities (Lovelock 2004). Using the same organizational technology to produce core and earned income activities reflects integration and coordination (Gonzalez et al. 2002).

Target markets refer to the audience(s) to whom the activity in question targets or seeks to benefit. Organizations in the for-profit sector selling a good or service for revenue need to attract paying customers. Typically, the beneficiaries of mission-driven services are considered clients. These clients tend to come to the nonprofit, and the organization responds to the needs of these clients (Alter 2004). Complicating the identification of a nonprofit’s target market is the fact that for these organizations, the market for clients and the market for resources are often separate (Padanyi and Gainer 2004). Resources can come from clients who pay fees for service, in which case, target markets overlap because the customer of the earned revenue service is also the mission-driven service’s client. In this sense, nonprofits that have a dual market orientation meet the needs of both clients and customers. However, resources can also come from private donors, corporate sponsors, and government contributors. As Padanyi and Gainer (2004) demonstrate in their study of 158 nonprofits, this creates multiple constituencies requiring different organizational marketing strategies and techniques.

Another way to think about embeddedness on the target market dimension is to consider the excludability of the earned income activity to the target population. Excludability is the extent to which consumption of the earned revenue-generating good or service is contingent on the consumption of the mission service (Weimer and Vining
2005). If a customer has to partake of the mission-driven service in order to also consume the earned income good or service, the earned income activity can be considered fully embedded on the target market dimension.

One can therefore consider the embeddedness of the organization on the two dimensions of technology and target market. Meyer and Rowan’s discussion (1977) of tight and loose coupling offers insights here (Cooney 2006). An earned revenue activity that uses the same organizational resources and targets the same audience as the mission activity is thought to be tightly coupled, or fully embedded. Organizations pursuing embedded earned revenue are charging for what they already do, finding ways to sustain themselves by carrying out their core mission. For example, an improv theater company selling tickets to its shows is pursuing embedded earned revenue. The revenue activity is, essentially, the mission-driven service. A customer cannot consume the revenue activity without also partaking of the mission-driven service. By engaging in this type of activity, the theater can capitalize on existing resources and relationships, minimizing reliance on external resources, and sustain its core mission activities by doing its core mission activities.

Market activities that share no commonalities in organizational resources or target markets with mission activities are loosely coupled, or external. An improv theater offering valet parking to the general public would be engaging in an external activity because the activity is not part of its core, does not use the same organizational technology to deliver this parking service, and does not exclude non-ticket-holding clients from consuming the service. Revenue activity that either uses the same technologies or targets the same markets, overlapping on one dimension, but not both,
can be considered integrated. An improv theater offering using its inputs (actors, set designers, facilities) to offer a dramatic play in an attempt to broaden its audience would be offering an activity integrated on the organizational technology dimension. An improv theater offering offsite teambuilding workshops or comedy exercises in corporate settings to its regular patrons would be engaging in a revenue activity integrated on the market dimension.

*Linking Embeddedness and Donated Income*

This section explores the expected relationships between earned revenue and donated income, specifically in the arts and culture subsector. These types of organizations provide an interesting context for initial exploration of the revenue-donated income relationship for the following reasons: the dependence of this subsector on earned revenue, the variations in adoption of earned revenue activities, and the overlap between clients, customers and donors. First, earned revenue accounts for over 70% of all income in the nonprofit sector, but different types of organizations show varying levels of reliance on this income stream. Organizations that offer benefits that are private in nature tend to rely more on earned revenue (Wilsker and Young 2010). As Fischer et al. 2011, demonstrate, arts and culture organizations offer this type of benefit and this subsector tends to be the most reliant both on earned revenue and donated income.

In addition to the nature of the benefits organizations offer, another consideration is the built-in opportunities organizations may have to monetize their activities. Arts and culture organizations serve many missions, such as free or reduced access to art, art education, and cultural preservation. An organization focused on cultural preservation, for example, has an opportunity to charge for admission while still staying true to its
mission. The presence of different missions within this subsector should mean there will be variation in the earned revenue activities an organization chooses to adopt.

Lastly, in the arts and culture subsector, donor, client, and customer circles tend to overlap. Typically, the client the organization seeks as a paying customer is also targeted to be a donor. People who set strategies, such as members of the board of directors, also consume the service. This contrasts with a human services agency like a food pantry, where the board members who set strategy are not necessarily clients, and clients are not necessarily (if ever) paying clients. Taken together, the sub-sector’s reliance on earned revenue and donated income, the opportunities for earned revenue activities, and the overlap in markets for service delivery offer an ideal ground in which to explore the connection between earned revenue and donated income.

Rather than hypothesizing about the impact of earned revenue generally and donated income it is assumed here that the expected relationships may vary based on the embeddedness of the specific sources of earned income for an organization. That is, two organizations with similar total amounts of earned income, but differing degrees of embeddedness for the sources of earned income, may have different donation outcomes. Earned income can be conceptualized as embedded or external. Embedded earned income activities share organizational technologies and target markets with mission-driven activities. When it comes to introducing revenue-generating goods or services, Preston (1988) theorizes that nonprofit organizations have a bias toward producing goods that have a high social benefit, which could be considered a reflection of embeddedness. If core services, representing public benefits, are being paid for by other income sources (including, for example, admissions or other fees for services), donors may not see the
need to donate additional funds. For example, an improve troupe selling tickets is engaged in an embedded activity. Seeing the organization fund itself with this type of revenue, a paying customer may not be incentivized to donate additional funds. Therefore, embedded revenue and donated income are hypothesized to be negatively related.

\[ H1: \text{An increase in embedded revenue will be associated with decrease in donated income.} \]

In contrast to embedded earned income, external earned income activities use different organizational technologies and target different markets than the mission related services. External earned income comprises activities that are not central to the organization’s mission, what Young (1998) classifies as unfavorable, designed solely to generate revenue – for example, an improv theater company running a café or offering and charging for valet services. However, these activities do not necessarily divert resources away from core service activities, and may, in fact, attract new donors by introducing new audiences to an organization’s core mission. For example, a customer may be attracted to a museum’s coffee shop or café, and as a result be introduced to the organization’s core mission (through, for example, promotional materials in the shop). By introducing the mission to an audience that is not already paying for core mission-related activities, this external activity may in fact supplement charitable mission by bringing new donors to the table. Therefore, external revenue and donated income are hypothesized to be positively related.

\[ H2: \text{An increase in external revenue will be associated with an increase in donated income.} \]
The potential effects of integrated revenue are more difficult to predict. An argument could be made for a negative relationship if the integrated activity is perceived to be reflective of the organization’s core mission, and the customer perceives herself to be paying for the service already. On the other hand, activities not seen as fully tied to the mission could be seen as avenues through which to bring in new donors and resources. The partial but not complete overlap of revenue and core mission activities may lead to tension between revenue and charitable mission goals (Eikenberry and Kluver 2004) and turn off potential donors, leading to crowd-out of donated income. Therefore, the expected relationship between integrated earned revenue and donated income outcomes could go either way; a primary purpose of this paper is to explore the relationships between integrated earned income activities and donated income.

DATA

The data for this analysis comes from the Cultural Data Project (CDP), which consists of data profiles from 14,000 arts and culture organizations in twelve states. Each profile contains financial, operational, and program data from a single fiscal year, as well as a board-approved audit or year-end financial statement. The sample in this paper includes organizations with data profiles for each of the years from 2007-2010, yielding a panel set of 2,115 organizations. By limiting the sample to arts and culture organization, this study holds constant organization types, so that financial and organizational characteristics can be measured against each other based on reasonable assumptions of similar overhead cost. I use fixed effects regression on this panel set, since fixed effects holds constant the organizational characteristics that do not vary over time but might otherwise lead to observed outcomes.


**VARIABLES**

**Dependent Variable: Donated Income**

The CDP data includes 36 total time-varying income variables: 22 earned revenue streams, 14 non-earned revenue streams. I collapse contributions from the following five sources to create one composite *donated income* measure: individuals, board/trustees, corporations, foundations, and other (non-specified) sources. As Table 14 shows, this income stream has a mean of $105,327, making it the primary source of income in this sample. However, this stream is decreasing, showing a drop of $14,279 over the four years of this study.

**Independent Variables: Various Measures of Earned Revenue**

*Total Earned Revenue* measures the income from all 22 earned revenue activities. The mean for total earned revenue, measured in ($1,000s) is $92,788. From 2007-2010, the mean increases almost 32%, demonstrating an uptick in earned revenue activities across the arts and culture organizations in this sample, as shown in Table 14.

The purpose of this study is to evaluate the relationship between the embeddedness of earned income and private donations. Therefore, I consider the extent to which each revenue activity type may be related to, or embedded within, the organization’s core mission activity. Following the literature reviewed previously, I categorize each of the earned income activities based on whether or not they are embedded (or external) on two dimensions: target market and organizational activities (Dart 2004; Alter 2004; Anheir and Toepler 1998; Weisbrod 1998). A specific earned

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7 The CDP data includes data on income from tribal, other contrib., parent org. support., related org., and in-kind sources, but revenue from these streams is negligible. Because these variables were not shown to have significance, they have been omitted from the models.
income activity can either be fully embedded, integrated, or external to the organization’s core charitable mission. A fully embedded earned income activity must target the same audience and use the same organizational inputs as the mission-driven activity. An integrated earned income activity either targets the same market or uses the same organizational inputs as the core activity-- but not both. An external earned income activity neither targets the same market nor uses the same organizational inputs to deliver service-related outputs.  

For this study, I include as embedded earned income the sum of income from admissions, tickets, performance subscriptions membership dues, workshops, tuitions, and touring income. These 7 income activities are embedded because they target the same markets as the core activities (or they are the core activities of an organization – i.e.: a theater troupe selling tickets), and use the same knowledge and processes to turn organizational inputs into outputs/services. The mean for this is $62,237 (in thousands). This mean is the highest of the three income categories, and has been increasing over time (showing a change of $3,477 from 2007-2010). I include as nonembedded revenue the sum of income from contracted performances, gallery sales, media subscriptions, royalties, concessions, parking, rent, advertising, sponsorship, special events, and other earned revenue (earned revenue not otherwise included in previously mentioned categories). In this sample, non-embedded earned income has a mean of $30,551. Revenue from this stream fell $3,158 over time, as shown in Table 14.

_________________________

9 A full list of earned revenue streams and decision rules for classification can be found in Table 46 in Appendix D.
Nonembedded earned income is further broken down into the following measures: total integrated earned income and external earned income. I code as total integrated revenue income from contracted performances, gallery sales, media subscriptions, and royalties. These activities are integrated because they either target the same markets or use the same organizational technology as the mission-based activities, but are not embedded on both dimensions. Organizations report a mean of $5,865 for total integrated revenue, increasing by $283 over time. I code as external revenue income from activities that are not related to core services, i.e., they do not target the same markets and do not use the same organizational technologies. In this case, the variable sums revenue from concessions, parking, rent, advertising, sponsorship, special events, and other earned revenue (earned revenue not otherwise included in previously mentioned categories). In this sample, the mean for external revenue is $24,686, and this type of revenue has also decreased over time, dropping $3,441 from 2007-2010, as shown in Table 14.

Lastly, total integrated revenue can be broken down into its component parts: integrated-market and integrated-technology. I code the following sources of earned income as integrated-market: revenue from gallery sales and media subscriptions. These earned income activities target the market(s) for core services, but do not use the same organizational technologies in their production. The mean for integrated-market is $342. For integrated-technology, I include earned income from contracted performances and royalties. These activities are integrated because they reflect the use of the same organizational technology as the core activities (or are the core activities, monetized), but do not target the same markets. The bulk of integrated revenue appears to be
concentrated along the technology dimension, with integrated-technology showing a mean of $5,523. Both types of integrated revenue increased during the period of this study (integrated-market by $148, integrated-technology by $135), as shown in Table 14.

To summarize the independent variables, I start by looking total earned revenue, and then break this variable into various component parts. The first division is embedded earned income and nonembedded earned income. Nonembedded earned income then gets separated into integrated earned income and external earned income. Lastly, integrated earned income is separated along dimensions of embeddedness into integrated-market revenue and integrated-technology revenue.

**Control Variables: Government Income, Investment Income, Revenue Diversification, & Size**

In order to isolate the effects of earned revenue on donated income, I control for other variables that vary by organization over time, including the revenue streams that are not donated or earned revenue, the revenue diversification of each organization’s financial portfolio, and other time-varying organizational characteristics. The different sources of non-earned revenue are collapsed into two categories: government income and investment income (Young, Wilsker and Grinsfelder 2010). *Government income* includes city, county, state, and federal contributions. As shown in Table 14, the mean for government income is $21,680, and decreased over time by $1,137. *Investment income* aggregates revenue from realized gains and losses, unrealized gains/losses, interest and dividends. The mean for this type of income is $5,693, and income from this stream dropped significantly over time (falling $15,914 from 2007 to 2010).
Revenue diversification may serve as a measure for organizational stability and increased control over income deployment (Froelich 1999; Carroll and Slater 2009; Bathurst et al. 2007). More control over income deployment would presumably make program spending a priority, so the relationship between revenue diversification and donations is expected to be positive. However, as Frumkin and Keating (2011) demonstrate, less diversification may benefit the organization by lowering administrative and fundraising expenses, potentially freeing more funding for programs. Conversely, more diversification may increase spending in both areas, leading to less spending on programs and demonstrating the relationship between revenue diversification and donations may be positive or negative. To control for these effects, revenue diversification is operationalized based on the concept of a Herfindahl-Hirschman Index (Chang and Tuckman 1994; Young, et al. 2010). The proportion of each stream (relative to total income) is squared. The sum of the squares is subtracted from 1 and used to represent diversification, where 0 is total concentration and 1 is total diversification. As Table 14 shows, organizations in this sample are relatively diversified, with a mean HHI of 0.741, though this mean did fall marginally over time (by 0.007 during the 4 years covered in this study).

Larger organizations may have more capacity to diversify and allocate resources to earned revenue activities\(^\text{10}\). To control for this, size is accounted for using staff size by organization and year (captured as full-time equivalents, or FTEs). Organizations show an FTE mean of 10.384, with a slight decrease of .218 over time, as shown in Table 14.

\(^{10}\) Location may also affect earned revenue and donated income trends, and was controlled for in the original OLS models. However, since the location is (presumed to be) constant, this control was dropped from the fixed effects models.
### Summary Statistics

<table>
<thead>
<tr>
<th>Summary Statistics</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Change from 2007-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donated Income*</td>
<td>8460</td>
<td>105.327</td>
<td>486.49</td>
<td>0</td>
<td>19348.46</td>
<td>-14.279</td>
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<td>Total Earned Revenue*</td>
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<td>406.274</td>
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<td>8404.067</td>
<td>0.319</td>
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<tr>
<td>Embedded Revenue*</td>
<td>8460</td>
<td>62.237</td>
<td>311.431</td>
<td>0</td>
<td>7542.928</td>
<td>3.477</td>
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<td>Nonembedded Revenue*</td>
<td>8460</td>
<td>30.551</td>
<td>144.551</td>
<td>0</td>
<td>3925.6</td>
<td>-3.158</td>
</tr>
<tr>
<td>Integrated Revenue*</td>
<td>8460</td>
<td>5.865</td>
<td>69.919</td>
<td>0</td>
<td>3246.714</td>
<td>0.283</td>
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<tr>
<td>Integrated-Market Revenue*</td>
<td>8460</td>
<td>0.342</td>
<td>3.788</td>
<td>0</td>
<td>178.2547</td>
<td>0.148</td>
</tr>
<tr>
<td>Integrated-Tech Revenue*</td>
<td>8460</td>
<td>5.523</td>
<td>69.831</td>
<td>0</td>
<td>3246.714</td>
<td>0.135</td>
</tr>
<tr>
<td>External Revenue*</td>
<td>8460</td>
<td>24.686</td>
<td>115.261</td>
<td>0</td>
<td>2303.595</td>
<td>-3.441</td>
</tr>
<tr>
<td>Government Income*</td>
<td>8460</td>
<td>21.68</td>
<td>123.12</td>
<td>0</td>
<td>3775.468</td>
<td>-1.137</td>
</tr>
<tr>
<td>Investment Income*</td>
<td>8460</td>
<td>5.693</td>
<td>446.904</td>
<td>-15672.61</td>
<td>12478.97</td>
<td>-15.914</td>
</tr>
<tr>
<td>Size (Full Time Equivalent)</td>
<td>8460</td>
<td>10.384</td>
<td>34.115</td>
<td>0</td>
<td>559</td>
<td>-0.218</td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>8460</td>
<td>0.74</td>
<td>0.281</td>
<td>0</td>
<td>9.369428</td>
<td>0.007</td>
</tr>
<tr>
<td>(Herdindahl-Hirschmann Index)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* measured in 1000s

Table 14 Summary Statistics for All Variables

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**MODEL**

This paper uses a fixed effects model to explore the relationship between earned revenue donated income, as specified below:

\[
\text{DONATED INCOME}_{it} = (\alpha + u_i) + \beta_1 \text{EARNED REVENUE} + \beta_2 \text{REVENUE DIVERSIFICATION} + \beta_3 \text{GOVERNMENT INCOME} + \beta_4 \text{INVESTMENT INCOME} + \beta_5 \text{SIZE} + \epsilon_{it}
\]
where the dependent variable DONATED INCOME represents the total amount of
donations an organization receives, i = each organization in the sample, and t represents
the respective year for the observation between 2007-2010.

I estimate a stepwise regression, adding additional independent variables with
each iteration. Initially, EARNED REVENUE is included as total earned revenue. In the
next iteration, EARNED REVENUE is separated into embedded and nonembedded
revenue variables. EARNED REVENUE is subsequently separated into embedded,
integrated, and external revenue. In the last iteration, EARNED REVENUE represents
embedded, integrated-market, integrated-technology, and external revenue variables.
Each specification is run twice, once controlling for REVENUE DIVERSIFICATION
and once without this control.

RESULTS

As Table 15 demonstrates, total earned revenue is not significantly related to
donated income. However, once earned revenue is separated into component parts, a
picture of mixed relationships emerges. Embedded revenue is negatively related to
donated income. For every $1,000 increase in this type of revenue, donated income
decreases in amounts ranging from $141 (Model 7) to $189 (Model 4). This relationship
is statistically significant whether or not revenue diversification is controlled for,
although the coefficients are slightly higher across all models that include this control
(Models 4, 6, and 8). These findings prove H1, which theorized a negative association
between embedded revenue and donated income. The crowding-out effect of $.14 for
every $1 increase in donated revenue is similar to what Smith (2007) found regarding the
relationship between government and donated income. This interaction could be a
reflection of what Fischer, Wilsker, and Young (2011) discovered regarding the connection between nonprofits providing services that are private in nature relying less on contributions than nonprofits that provide services that are public in nature. This interaction could also be reflective of a perception the donor has of already paying for the organization’s mission – i.e.: if a donor purchasing a ticket for an improve troupe’s show may already think s/he is paying for the mission and, therefore, be less inclined to donate in addition to paying for goods or services.

Nonembedded revenue, as a composite of all integrated and external revenue streams, is positively related to donated income, as shown in Table 15. A $1,000 increase in nonembedded revenue is associated with an increase of $265 in donated income (Model 3). When controlling for revenue diversification, the relationship is still positive. The associated increase in donated revenue is $248. When nonembedded revenue is broken down into its components, external revenue also shows a positive relationship with donated income. A $1,000 increase in external revenue is associated with increases in donated revenue of $320 (Model 5) and $309 (Model 7). When controlling for revenue diversification, the association with donated income is still positive, though the increases are slightly smaller ($303 in Model 6, $292 in Model 8). These findings prove H2, which theorized a positive association between external revenue and donated incomes. While unexpected, these findings could show that introducing new audiences to an organization with which they were previously unfamiliar could encourage support from this new pool.

The relationship with integrated revenue shows mixed findings. Integrated-total revenue is negatively related to donated income. A $1,000 increase in integrated-total revenue is...
revenue is associated with a decrease in donated income of $1,580 (Model 5). When controlling for revenue diversification, this decrease is $1,602 (Model 6). Separating integrated revenue into integrated-market and integrated-technology revenue streams provides additional insight into the relationship between integrated revenue and donations. Integrated-market revenue is positively related. A $1,000 increase in this revenue stream is associated with a $4,847 increase in donated income (Model 7). This increase is $4,680 when controlling for revenue diversification (Model 8). However, integrated-technology revenue is negatively related to donated income. A $1,000 increase in this revenue stream is associated with a decrease in donated income of $2,199 (Model 7). When controlling for revenue diversification, this decrease shifts slightly upward to $2,207 (Model 8). Although the coefficients for integrated-technology revenue are smaller than those for integrated-market, integrated-technology’s negative direction appears to be driving the relationship between integrated-total revenue and donated revenue, as demonstrated in Table 15.

In addition to being negatively related to integrated-total revenue and integrated-technology revenue, donated income also has a negative relationship with revenue diversification itself. As organizations adopt new sources of income, regardless of type, and the HHI increases (moves toward diversification), the relationship with donated income is negative. A one standard deviation increase is HHI is associated with decreases in donated income ranging from $218,017 (Model 8) to $223,032 (Model 6). This negative association may indicate the need for caution on the part of nonprofit organizations engaged in earned revenue activities, since the very act of diversification
may crowd out donor dollars, regardless of the whether specific types (nonembedded revenue, external revenue) have a positive association with donated income.
<table>
<thead>
<tr>
<th>Donation Income</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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<tbody>
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<td>Total Earned Revenue</td>
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<td>0.036</td>
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<td></td>
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<tr>
<td>Embedded Revenue</td>
<td></td>
<td></td>
<td>-0.166**</td>
<td>-0.189**</td>
<td>-0.157**</td>
<td>-0.180**</td>
<td>-0.141**</td>
<td>-0.163***</td>
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<tr>
<td>Nonembedded Revenue</td>
<td></td>
<td></td>
<td>0.265***</td>
<td>0.248***</td>
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<tr>
<td>Integrated Revenue - Total</td>
<td></td>
<td></td>
<td>-1.580***</td>
<td>-1.602***</td>
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<td>Integrated Revenue - Market</td>
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<td>4.847***</td>
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<td>Integrated Revenue - Tech</td>
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<td>-2.199***</td>
<td>-2.207***</td>
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<td></td>
<td></td>
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<tr>
<td>External Revenue</td>
<td></td>
<td></td>
<td>0.320***</td>
<td>0.303***</td>
<td>0.309***</td>
<td>0.292***</td>
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<tr>
<td>Revenue Diversification</td>
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<td>-789.574***</td>
<td>-794.844***</td>
<td>-796.543***</td>
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<td></td>
</tr>
<tr>
<td>Government Income</td>
<td>0.203***</td>
<td>0.188***</td>
<td>0.190***</td>
<td>0.174***</td>
<td>0.187***</td>
<td>0.173***</td>
<td>0.187***</td>
<td>0.172***</td>
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<tr>
<td>Investment Income</td>
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<td>0.014*</td>
<td>0.030***</td>
<td>0.013*</td>
<td>0.028***</td>
<td>0.012</td>
<td>0.028***</td>
<td>0.012935*</td>
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n=8460 (2115 groups)
R-sq: within 0.006 0.009 0.008 0.012 0.011 0.015 0.015 0.019
between 0.590 0.571 0.380 0.305 0.078 0.042 0.042 0.022
overall 0.449 0.427 0.287 0.227 0.062 0.036 0.035 0.020

cor(u_i, Xb)

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<th>F(4,6341)</th>
<th>F(5,6340)</th>
<th>F(6,6339)</th>
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<td></td>
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<td>9.74</td>
<td>12.33</td>
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<td>13.81</td>
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<td>0.670</td>
<td>0.681</td>
<td>0.702</td>
</tr>
</tbody>
</table>

all income/revenue variables measured in ($1000s)

***p<.01, **p<.05, *p<.01

Table 15 The Effects of Earned Revenue On Donated Income
DISCUSSION

No consensus exists regarding the interaction between earned revenue and donated income, but, as this study attempts to investigate, the nature of earned revenue might matter when it comes to effects on an organization’s donated income, especially given the context of donor motivations. Given the embeddedness framework and the context of the arts and culture subsector, the common denominator of earned revenue activities that may crowd out donated income is the organizational technology dimension. Regardless of market - i.e.: if the activity is fully embedded like ticket sales, or integrated along technology but offered to a new market such as an improve troupe staging a dramatic production of *Our Town* to regular subscribers - when the same organizational inputs are used to create both core-related services and earned revenue services, donated income appears to be lower. This holds with the assumptions that customers paying admissions fees or ticket prices may already perceive themselves to be funding the core mission, thereby funding the organization’s publicly related services. In addition, this relationship may reflect the fact that using the same inputs to delivery multiple outputs has the potential to degrade each output, or distract the organization from its original mission focus.

However, offering something new, be it to the same target audience or a different one, tends to be positively related with donated income. An external service like a café in an art museum may attract new donors for its host by introducing customers stopping in for food to the museum’s mission without the museum having to dedicate organizational
resources to this effort. Similarly, an integrated service, such as an improve troupe’s
corporate team-building workshops, does not divert organizational resources away from
the mission, but rather sees the troupe’s actors bringing the core activities to new
audiences. The consumer in the café and the employees at the workshop may not be
aware of or perceive themselves to already be supplementing the organization’s core
activities. They may even be attracted to the mission and be willing to contribute to the
organization, so the organization realizes increased donated income without sacrificing
organizational inputs needed to deliver core services.

In addition to the varied results of the interactions between different types of
earned revenue and donated income, revenue diversification itself has a negative
association with donated income. This shows organizations may want to exercise caution
when adopting new revenue streams. To the extent an organization relies on donated
income, or cannot realize earned income returns greater than the potential losses on
donations that are crowded out, branching out into new activities could cause more harm
or organizational stability than maintaining the traditional donor-dependent model.

Given the mixed findings in this study, the results may be able to help organizations
choose wisely when it comes to determining the right earned revenue activities to pursue.

Limitations

One limitation of this study is the assumption that that earned revenue is the
independent variable affecting the dependent variable of donated income. However, the
relationship might work in the opposite direction, i.e.: donated income affects earned
revenue. As Wilsker et al.(2011) point out, income sources may be determined by the
nature of goods and services produced, so the relationships between earned revenue and
donated income are in line with what previous studies have found in the arts and culture sector.

Aside from the direction of the relationship, the assumption of exogeniety between the income streams may be incorrect. They may actually be endogenous, which means the models specified in this study are not appropriate. Exploring additional econometric techniques such as LSDV and GSS models may offer more precise measurement, as might capturing the variables in terms of elasticities, rather than absolute amounts.

In addition, the specification of the variables is also a limitation. While the theory may be precise, the application of the embeddedness dimensions is a less than perfect in practice and requires subjective classification. Even though this study controls for subsector by only looking at arts and culture, these organizations are not homogenous, and do not all have the same mission. Some focus on theatre performances, others on cultural preservation, still others on research and education, and so on. For the purpose of this study, all earned revenue types were classified as a whole as embedded, integrated or external. It may be that a particular source of earned income is embedded for one organization, and integrated or external for a different organization. However, since previous studies have shown arts and culture organizations to rely more on earned income than other subsectors, as well as potentially positive crowding-in effects of earned income, the embeddedness framework does offer a starting point to evaluate these interactions, however imprecise it might be.
CONCLUSION

This study set out to explore the relationship between earned revenue and donated income. While many authors have explored the relationship between government funding and private donations, few empirical studies have looked specifically at the effects of earned revenue and donations. Those that do exist tend to group all earned income together, or as an aggregate program service revenue variable. Using the framework of embeddedness, I find the nature of each revenue activity matters when it comes to its effect on donations.

Previous literature showed mixed findings regarding the effects of earned revenue and donated income. Kingma (1995), for example demonstrates that a $1 increase in earned revenue crowds out $3.59 in donated income. However, Posnett and Sandler (1989) show no crowding-in or crowding-out effects of alternative sources of revenue, and Kerlina and Pollak (2011) demonstrate a crowding-in effect. These mixed findings may be due to donor motivations for giving - i.e.: if they perceive themselves to already be supporting the organization through the purchase of goods or services, they may not be willing to also donate funds. These findings may also be due to the fact that earned revenue tends to be studied as an aggregate measure, such as the sum of revenue from all program/service-related activities.

By linking earned revenue activities to an organization’s core mission activities through the dimensions of organizational technology and target markets, I demonstrate that different activities have different effects on donated revenue. An earned revenue activity embedded on the organizational technology dimension crowds out donor dollars, possibly because donors feel their consumption of a revenue-generating service may
already contribute to the support of the mission-driven activity. This holds true for both fully embedded activities, which target the same core markets, and integrated activities that aim to deliver core activities to new markets. However, activities that offer something outside of the core service, be it to the same target markets, or to different ones, tend to crowd in donor dollars. This could be the case because customers paying for the earned revenue-related good or service do not seem themselves as consuming the core service, and, in fact, may not have been previously aware of the organization’s mission. In this way, the external or integrated activity could be attracting new audiences who then support the organization through donations.

In addition to introducing a framework through which to analyze earned revenue and donated income, this study also has practical implications. Organizations looking to pursue new sources of earned revenue can use this framework to help in their decision-making process by considering how the activity will complement core mission-related activities. As this study demonstrates, the nature of the earned income activity matters. Using existing technologies to deliver new goods and services may ultimately damage charitable mission, while offering new goods/services may be able to attract new donors without straining existing resources.

As has been noted, this work focuses primarily on arts and culture organizations. The overlap between targeted clients, paying customers, and donors allows for the consideration of, for example, the source of support for core services, the likelihood of the same audiences giving the organization in multiple ways (i.e.: through the purchase of a service and through a donation), and the potential effects of resource diversion. However, while theory offers a place to start when considering effects, there is no way to
know what actually is happening, and how donors really consider earned revenue, if at all, when making giving decisions. In addition, the findings of this study may not be applicable in subsectors where the client, customer, and donor audiences are clearly differentiated. Next steps for this study include a qualitative exploration of donor behavior to see if the theories behind the connection between embeddedness and donated income hold true, as well as application of the embeddedness framework to other types of organizations in the nonprofit sector. Regardless, at least for arts and culture organizations, the connections between the nature of an organization’s earned revenue stream, its core mission and its donated income matters, and the embeddedness framework can help shed light on these relationships.
Chapter 4: Earned Revenue - Complement to or Substitute for Charitable Mission?

INTRODUCTION

Nonprofit organizations have been engaged in increasing levels of commercial, market-driven earned revenue activity\(^{11}\), which now account for 52% of funding in this sector (Young, Salamon, and Grinsfelder 2012). This paper explores how changes in earned revenue activities may be related to charitable mission, as represented by service level outputs, in nonprofit organizations. Some literature has focused on the advantages of earned revenue, finding it to be a complement to mission-driven activity because organizations can procure much-needed financial resources that can be invested in programs and service delivery (Cordes and Weisbrod 1998, Dart 2004). Other literature has found earned revenue to distract from mission-driven programs and services, leading organizational attention away from core program activities in order to be invested in earned revenue pursuits (Weisbrod 1998b; Fourcade and Healy 2007).

Typically, earned revenue is studied as an aggregate sum of all market-driven income streams. However, not all earned revenue may affect mission-driven service delivery in the same way. Some market-based activities are embedded within the organization’s core mission-driven activities, defined here as earned income activities that use the same organizational resources, and target the same markets as the core

\(^{11}\) Commercial revenue: income earned through the sale of goods/services, exclusive of donations and government grants (Anheir and Toepler 1998)
mission driven activity (Alter 2004, Cooney 2006). Given these shared elements, embedded activities may serve as complements to services. Other market-based activities can be defined as external to the core mission activities, using separate organizational technologies, and targeting different markets. Removing these shared elements of programming could be a distraction, leading to a decrease in service delivery outcomes.

A third class of revenue activities can be defined as integrated within the organization, either using sharing organizational technologies, or targeting the same markets as the core mission-driven services. The effect these activities will have on service delivery is unknown. On the one hand, organizations that draw on existing technologies and skills to make headway in new markets may be able to generate added revenue at minimal cost. Similarly, the organizations that leverage current market relationships to deliver new services may also see positive increases in service delivery outcomes. On the other hand, the use of existing organizational technologies to serve different target markets may distract resources or take the attention of target stakeholders (donor and client) away from core mission-driven activities, thus negatively impacting service. The provision of new services to the core target market may also distract from the core purpose of the organization. This study attempts to explore the nature of the relationship between mission- and market- activities, and specifically the potential importance of the level of embeddedness of market activities on charitable mission outcomes.

Using data from the Cultural Data Project, which collects financial and program information from arts and culture organizations in 12 states, I analyze financial and program information from 2,000 organizations over a period of four years to determine
the effects of changes in earned revenue on program service delivery. Findings suggest that, indeed, the embeddedness of earned income activities may moderate the relationships between market- and mission-driven activities. Earned income sources that are completely embedded within the organization (same technology and same market) are positively related to some aspects of service delivery. However, integrated activities, especially those integrated on the technology dimension but not on target markets, are associated with a negative effect on service-level outcomes. These findings may offer cause for concern, given the fact that integrated activities are trending upwards in this sector, even as income from government, donated, and investment sources is decreasing.

The following section explores the nature of embeddedness and expected effects on service delivery. The third section contains an empirical analysis of the relationship between the various forms of earned revenue and service level outcomes. A discussion of the findings and limitations follows, and the last section presents conclusions, and steps for future study.

**THEORY: EARNED INCOME AND EMBEDDEDNESS**

Organizations are resource-dependent. Resource dependence refers to the fact that organizational survival is predicated on the acquisition and management of resources (Pfeffer and Salancik 1978) in order to increase or merely maintain stable output levels (Weisbrod 1998b). These resources can include funding, human capital, space, program materials, and technology. Resources are also important to an organization for reasons beyond survival. Pfeffer and Salancik (1978) describe organizational effectiveness as the extent to which organizations can create outcomes acceptable to the stakeholders on whom they are most dependent. Nonprofit organizations are mission-driven, often
dedicated to important spiritual and secular values that serve the public good (Frumkin and Andre-Clark 2000). They are non-distributive, meaning that they do not distribute earnings to shareholders, and non-coercive – no one has to give support to these organizations (Hansmann 1980). Given the resource dependence of organizations, one could make the case that an organization chooses to operate as a nonprofit based on the assumption that the nonprofit form is the best way to gain much-needed support from donors and volunteers (Moore 2000; Knutsen 2012). For example, the nonprofit designation can signal trustworthiness to private donors, status as preferred mechanism for delivering quasi-public services, and/or the means of pursuing ideological objectives (James 2003).

The way in which a nonprofit organization obtains revenues and the nature of its outputs can be categorized along what Weisbrod (2009) describes as a collectiveness index, which reflects the degree to which “an organization provides external social benefits”. A nonprofit organization depicted as a philanthropic entity that continues to receive donated income suggests this organization meets a public mission. Similarly, nonprofits that receive government funding are meeting their public mission by continuing to secure approval/funding from government. Following Weisbrod’s theory of a causal relationship between the source(s) of an organization’s resources and how it uses these resources leads to the conclusion that organizations that receive public and/or government support provide some sort of public benefit by virtue of the nature of the source of their inputs. By contrast, earned income is perceived as not being associated with public benefit, and thus perhaps not aligned with the provision of mission related services for the organization.
However, income from donations and government sources combined accounted for less than half of all nonprofit revenues in 2010, while revenues from earned income accounted for more than 50 percent of all revenues in the same year (Blackwood, et al. 2012). Earned revenue has been the primary source of revenue for nonprofit organizations for decades. However, earned income does not have to be antithetical to the mission related services of the organization. Oftentimes, nonprofit organizations charge fees for their mission driven services, such as fees for admission to a theatre performance, or rental income for low income housing projects, or charges for medical services provided by nonprofit organizations. Further, even if earned income is not directly a result of mission related services, it may help provide needed infrastructure support for mission related services. Earned revenue may be attractive to nonprofit organizations to the extent that it provides greater flexibility over the use of funds. Funding from donations and government sources often limit the way funds can be used by restricting use to program related activities. However, to administer successful programs, nonprofit organizations also have expenses for administration and fundraising. They need to be able to pay staff, cover for overhead costs, invest in adequate facilities (Gronbjerg and Nagle 1994), and purchase technology to meet service delivery needs. The ability of a nonprofit to earn revenue (through mission or non-mission related services), and then use this revenue as it sees fit may allow the organization to meet its needs and better deliver core serves.

Therefore, one testable proposition is that by pursuing earned income, nonprofit organizations are able to support and expand their mission-driven activities. However, the literature is mixed as to whether earned revenue does, indeed, complement or become
a substitute for service delivery. In her broad literature review, Froelich (1999) theorizes earned revenue can help nonprofits reduce organizational reliance on, and, thus, vulnerability to, income uncertainties and the priorities of resource providers that may not align with the organization’s own focus. As part of a diversified revenue strategy, earned income is hypothesized to increase mission related outcomes. Hughes and Luksetich (2004) provide empirical support for this in their study of 209 arts and culture organizations, showing that a growing reliance on commercial ventures does not divert funding resources from service provision. On the other hand, Sloan’s (1998) comparison of for-profit and nonprofit hospitals shows that hospitals that increase their earned revenue activities may do so at the expense of public service provision such as uncompensated care, demonstrating a potential substitution effect.

Part of the reason for the mixed findings may have to do with how earned revenue has been operationalized in prior literature, as an aggregate measure – i.e.: commercial revenue (Child 2010) or program service revenue (Okten and Weisbrod 2000). However, different earned revenue activities may not uniformly affect service delivery in the same way. This paper attempts to address this gap by examining the relationship between earned revenue activities and core service delivery. Alter (2004) offers guidance for this examination in her typology of social enterprises, in which she uses mission orientation, business/program integration, target markets, and operational models to examine how organizations combine social values and business practices. Specifically, this paper builds from Alter’s typology to consider the extent to which different sources of earned income are embedded with the mission of the organization on two dimensions: 1) the organizational technology each uses to produce outputs; and 2) the markets each target.
Organizational technology refers to organizational resources, human resources, and technology systems used to produce products or render services (Damanpour and Evan 1984), transforming inputs into outputs (Scott 1975). According to Kimberly and Evanisko (1981), this technology is directly related to the basic work activity of an organization. These include financial requirements, managerial expertise, and production capabilities (Lovelock 2004). Using the same organizational technology to produce core and earned income activities reflects integration and coordination (Gonzalez et al. 2002).

Target markets refer to the audience(s) to whom the activity in question targets or seeks to benefit. Organizations in the for-profit sector selling a good or service for revenue need to attract paying customers. Typically, the beneficiaries of mission-driven services are considered clients. These clients tend to come to the nonprofit, and the organization responds to the needs of these clients (Alter 2004). Complicating the identification of a nonprofit’s target market is the fact that for these organizations, the market for clients and the market for resources are often separate (Padanyi and Gainer 2004). Resources can come from clients who pay fees for service, in which case, target markets overlap because the customer of the earned revenue service is also the mission-driven service’s client. In this sense, nonprofits that have a dual market orientation meet the needs of both clients and customers. However, resources can also come from private donors, corporate sponsors, and government contributors. As Padanyi and Gainer (2004) demonstrate in their study of 158 nonprofits, this creates multiple constituencies requiring different organizational marketing strategies and techniques.

Another way to think about embeddedness on the target market dimension is to consider the excludability of the earned income activity to the target population.
Excludability is the extent to which consumption of the earned revenue-generating good or service is contingent on the consumption of the mission service (Weimer and Vining 2005). If a customer has to partake of the mission-driven service in order to also consume the earned income good or service, the earned income activity can be considered fully embedded on the target market dimension.

One can therefore consider the embeddedness of the organization on the two dimensions of technology and target market. Meyer and Rowan’s discussion (1977) of tight and loose coupling offers insights here (Cooney 2006). An earned revenue activity that uses the same organizational resources and targets the same audience as the mission activity is thought to be tightly coupled, or fully embedded. Organizations pursuing embedded earned revenue are charging for what they already do, finding ways to sustain themselves by carrying out their core mission. For example, an improv theater company selling tickets to its shows is pursuing embedded earned revenue. The revenue activity is, essentially, the mission-driven service. A customer cannot consume the revenue activity without also partaking of the mission-driven service. By engaging in this type of activity, the theater can capitalize on existing resources and relationships, minimizing reliance on external resources, and sustain its core mission activities by doing its core mission activities.

Market activities that share no commonalities in organizational resources or target markets with mission activities are loosely coupled, or external. An improv theater offering valet parking to the general public would be engaging in an external activity because the activity is not part of its core, does not use the same organizational technology to deliver this parking service, and does not exclude non-ticket-holding
clients from consuming the service. Revenue activity that either uses the same technologies or targets the same markets, overlapping on one dimension, but not both, can be considered integrated. An improv theater offering using its inputs (actors, set designers, facilities) to offer a dramatic play in an attempt to broaden its audience would be offering an activity integrated on the organizational technology dimension. An improv theater offering offsite teambuilding workshops or comedy exercises in corporate settings to its regular patrons would be engaging in a revenue activity integrated on the market dimension. Figure 3 demonstrates the two dimensions of embeddedness.

![Figure 3: The Embeddedness Matrix](image-url)
Hypotheses: The Embeddedness of Earned Income & Service Delivery

This section explores the expected relationships between earned income and charitable mission, as represented by service delivery. Service delivery is an important outcome for nonprofit organizations because it is the manifestation of the mission driving the organization’s existence. There are different ways to measure service delivery, but generally it can be conceptualized on two different dimensions: volume (i.e.: amount spent on programs and the number of people receiving services) and composition (the characteristics of the people receiving services – i.e.: paying versus non-paying clients).

First, in terms of volume, one can consider program spending, or the amount of money spent on mission-related programs within the nonprofit organization. For the purpose of financial accounting and IRS filings, generally accepted accounting principles (GAAP) require nonprofit organizations to categorize expenses based on function. These expenses fall into three categories: program, fundraising, and administrative. Program spending, as quantified by program expenses, captures how much money is being spent on the programs and services specified by the organization’s mission (Baber, Daniel, Roberts 2002). This connection to the mission can demonstrate institutional priorities (Chabotar 1989; Hughes and Luksetich 2004) because it shows how the organization allocates funding not needed to procure resources (i.e.: fundraising expenses) or cover overhead costs (i.e.: administrative expenses).

While program spending can be reflective of organizational priorities, increased spending may just be reflective of increasing costs of providing services. Therefore, in addition to financial measures, White and Simas (2007) suggest measuring total attendance (the number of people receiving services/coming to programs). This measure
of service volume captures client consumption in absolute terms, and can make the service volume picture more robust. Earned income can affect service volume as a complement, by providing a source of funding for mission-driven activities, or as a substitute, by distracting the organization’s inputs and focus away from core services.

Another dimension on which to measure service outcomes is service composition. It may be important to consider the degree to which earned revenue affects who receives core services, especially for those organizations prioritizing public access to those clients who may lack the ability to pay for services. Composition captures the breakdown between paying customers and non-paying clients to reflect the public responsibility nonprofit organizations have (Bailey and Falconer 1998; Cain and Meritt 1998; Rentschler, Hede, and Ramsey 2004). This measure can be absolute, in terms of total number of clients accessing services for free. It can also be relative, measured as the proportion of clients who access services for free relative to total clients accessing services (paid and free). Earned income activities could price out target consumers, affecting access (Salamon 1995; Guo 2006).

Rather than hypothesizing about the impact of earned income generally and service outcomes, it is assumed here that the expected relationships may vary based on the embeddedness of the specific sources of earned income for an organization. That is, two organizations with similar total amounts of earned income, but differing degrees of embeddedness for the sources of earned income, may have different service outcomes. First, earned income can be conceptualized as embedded or external. Embedded earned income activities share organizational technologies and target markets with mission-driven activities, and thus are hypothesized to be associated with an increase in service
volume. However, because embedded revenue is, by definition, generated from fee paying clients, it may reduce access to services. An increased reliance on income from fee paying clients may reduce the organization’s provision of free services.

H1A: An increase in embedded revenue will be associated with an increase in service volume, measured as the number of clients receiving services and the amount of funds spent on program services.

H1B: An increase in embedded revenue will be associated with a decrease in service access, defined as the number and proportion of clients receiving free services.

In contrast to embedded earned income, external earned income activities use different organizational technologies and target different markets than the mission related services. External earned income comprises activities that are not central to the organization’s mission, what Young (1998a) classifies as unfavorable, designed solely to generate revenue – for example, an improv theater company running a café or offering and charging for valet services. Organizations pursuing external of earned income may have to sink costs into acquiring new technologies or resources needed to deliver this external service. In addition, earned income pursued through external activities may crowd out donor support of if they think the organization is now engaged in for-profit activity unrelated to the core mission (Segal and Weisbrod 1998). Therefore, external earned income is expected to be negatively related to both service volume and service composition

H2A: An increase in external earned income will be associated with a decrease in service volume.
H2B: An increase in external earned income will be associated with a decrease in service access.

The potential effects of integrated revenue are more difficult to predict. For example, integrated revenue activities could capitalize on the cost complementarities of shared technologies. If the activity is embedded along the market dimension, service volume could be positively affected by drawing more resources from existing clients/customers. Therefore, an argument could be made for a positive relationship between integrated revenue and service volume.

However, some of the issues that may plague external revenue activities could also have similar adverse effects for integrated revenue. Organizations attempting to use new technologies to address current markets may face unexpected costs when it comes to execution. Clients in current markets may also not respond positively to the new service being provided. Similarly, the use of existing technologies to reach new markets could distract much needed resources from mission-driven activities, thereby decreasing service delivery. The partial but not complete overlap of revenue and core mission activities may lead to tension between revenue and service delivery goals (Eikenberry and Kluver 2004). Unlike external activities, however, measuring profitability from integrated activities is difficult because of the shared nature between these and core mission activities. Similarly, eliminating costly aspects may not be possible if these organizational technologies are needed to deliver core services. Engaging in integrated revenue activities may negatively affect mission-driven activities but leave the organization little recourse in reversing these trends.
Additionally, the pursuit of resources from, for example, paying customers, may come at the expense of those who traditionally have received the service at free or reduced cost (Huszar and Seckler 1974), affecting who can access these services. This potential diversion of services away from the core activity’s target market would negatively affect service composition. Therefore, the expected relationship between integrated earned income and service delivery outcomes could go either way; a primary purpose of this paper is to explore the relationships between integrated earned income activities and service outcomes. Table 16 summarizes the expected relationships.

<table>
<thead>
<tr>
<th>Embedded Revenue (same org. tech and same target market)</th>
<th>Service – Volume (money spent on programs, people attending)</th>
<th>Service – Composition (clients attending for free)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1A: +</td>
<td>H1B: -</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>External Revenue (different org. tech. and different target market)</th>
<th>Service – Volume (money spent on programs, people attending)</th>
<th>Service – Composition (clients attending for free)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2A: -</td>
<td>H2B: -</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Integrated Revenue (same org tech. or same target market)</th>
<th>Service – Volume (money spent on programs, people attending)</th>
<th>Service – Composition (clients attending for free)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Table 16 Summary of Hypotheses

+ indicates an expected positive relationship
- indicates an expected negative relationship
DATA

The data for this analysis comes from the Cultural Data Project (CDP), which consists of data profiles from 14,000 arts and culture organizations in twelve states. Each profile contains financial, operational, and program data from a single fiscal year, as well as a board-approved audit or year-end financial statement. The sample in this paper includes organizations with data profiles for each of the years from 2007-2010, yielding a panel set of 2,115 organizations. By limiting the sample to arts and culture organization, this study holds constant organization types, so that financial and organizational characteristics can be measured against each other based on reasonable assumptions of similar overhead cost. I use fixed effects regression on this panel set, since fixed effects holds constant the organizational characteristics that do not very over time but might otherwise lead to observed outcomes.

VARIABLES

Dependent Variables: Program Spending, Total Attendance, & Program Access

PROGRAM SPENDING

The first measure of service delivery used here is program spending, capturing an aspect of service volume. Program spending quantifies how much is being spent on the programs and services specified by the organization’s mission (Baber, Daniel, Roberts 2002), which can demonstrate institutional priorities (Chabotar 1989; Hughes and Luksetich 2004). Program spending is quantified in two different ways: total program expenses, and the program expense ratio. Total program expenses is an absolute

\[12\] I ran initial estimates using OLS regression, but the fixed effects model is preferred because it addresses omitted variable biases and latent variables. The results from the OLS regressions and a comparison to the fixed effects results can be found in Tables 47-52 in Appendix E.
measure that captures the total number of dollars an organization spends on programs. The mean in this sample, measured in $1000s, is $147,372. Program expenses increased over time by an average of $5,838 from the initial time period in 2007 to 2010, as shown in Table 17.

The program expense ratio is a relative measure that captures how much of every dollar goes toward program expenses. Program expense ratios are commonly used by popular rating entities such as Charity Navigator and the Better Business Bureau as a measure of an organization’s financial health because they are viewed as representative of mission efficiency, or the proportion of total funds spent on direct services. For example, the BBB’s Standards for Charity Accountability state that an organization should spend at least 65 percent of its expenses on programs, with less than 35% on administration and fundraising expenses. According to Hager and Flack (2004), in arts, culture, and humanities organizations, programming accounted for an average of 72% of total expenses. As shown in Table 17, the organizations in this sample show a similar trend, with the program expenses accounting for 72.6 % of expenses, on average. These expenses were relatively unchanged during the time period of interest (increasing .4% from 2007-2010), suggesting that there may be little variation to explain.

TOTAL ATTENDANCE

Another measure of service delivery volume is total attendance. In their empirical study of market-based practice and church performance, White and Simas (2008) suggest measuring total attendance (the number of people receiving services/coming to programs) as a measure of program outputs. This is an absolute measure of consumption and is a means of tailoring performance expectations for organizations whose mission is
to attract patrons to see shows, art exhibits, and other culturally-related products. Organizations in this sample had a mean total attendance of 14,159, and demonstrated a positive increase in attendance over time, as shown in Table 17.

**PROGRAM ACCESS**

Assuming public access is part of the nonprofit organization’s mission, public access may also be an important service delivery outcome (Bailey and Falconer 1998; White, Hede, Rentschler 2009). One way to measure access is the prevalence of free or no-cost services (Cain and Meritt 1998). Free service can be measured in two ways: total free attendance and free attendance ratio. Total free attendance reflects the absolute consumption of free programs/services over time. Organizations in this sample report a mean attendance of 11,936 and show a positive increase over time, as illustrated in Table 17.

The free attendance ratio is a relative measure demonstrating the proportion of people attending free relative to total program attendance. Organizations in this sample show a mean of .493, translating to 49.3% of people attending programs/services for free, with a change over time of 2.6%, as shown in Table 17.

**Independent Variables: Various Measures of Earned Revenue**

The CDP data used for this study includes 22 different types of earned revenue. Total Earned Revenue measures the income from all earned revenue activities. The mean for total earned revenue, measured in ($1,000s) is $92.788. From 2007-2010, the mean increases almost 32%, demonstrating an uptick in earned revenue activities across the arts and culture organizations in this sample, as shown in Table 17.
The purpose of this study is to evaluate the relationship between the embeddedness of earned income and service delivery. Therefore, I consider the extent to which each revenue activity type may be. Following the literature reviewed previously, I categorize each of the earned income activities based on whether or not they are embedded (or external) on two dimensions: target market and organizational activities (Dart 2004; Alter 2004; Anheir and Toepler 1998; Weisbrod 1998). A specific earned income activity can either be fully embedded, integrated, or external to the organization’s core service delivery. A fully embedded earned income activity must target the same audience and use the same organizational inputs as the mission-driven activity. An integrated earned income activity either targets the same market or uses the same organizational inputs as the core activity— but not both. An external earned income activity neither targets the same market nor uses the same organizational inputs to deliver service-related outputs.

For this study, I include as embedded earned income the sum of income from admissions, tickets, performance subscriptions membership dues, workshops, tuitions, and touring income. These 7 income activities are embedded because they target the same markets as the core activities (or they are the core activities of an organization— i.e.: a theater troupe selling tickets), and use the same knowledge and processes to turn organizational inputs into outputs/services¹³. The mean for this is $62,237 (in thousands). This mean is the highest of the three income categories, and has been increasing over time (showing a change of $3,477 from 2007-2010). I include as

¹³ A full list of earned revenue streams and decision rules for classification can be found in Table 46 in Appendix D.
nonembedded revenue the sum of income from contracted performances, gallery sales, media subscriptions, royalties, concessions, parking, rent, advertising, sponsorship, special events, and other earned revenue (earned revenue not otherwise included in previously mentioned categories). In this sample, non-embedded earned income has a mean of $30,551. Revenue from this stream fell $3,158 over time, as shown in Table 17.

Nonembedded earned income is further broken down into the following measures: total integrated earned income and external earned income. I code as total integrated revenue income from contracted performances, gallery sales, media subscriptions, and royalties. These activities are integrated because they either target the same markets or use the same organizational technology as the mission-based activities, but are not embedded on both dimensions. Organizations report a mean of $5,865 for total integrated revenue, increasing by $283 over time. I code as external revenue income from activities that are not related to core services, i.e., they do not target the same markets and do not use the same organizational technologies. In this case, the variable sums revenue from concessions, parking, rent, advertising, sponsorship, special events, and other earned revenue (earned revenue not otherwise included in previously mentioned categories). In this sample, the mean for external revenue is $24,686, and this type of revenue has also decreased over time, dropping $3,441 from 2007-2010, as shown in Table 17.

Lastly, total integrated revenue can be broken down into its component parts: integrated-market and integrated-technology. I code the following sources of earned income as integrated-market: revenue from gallery sales and media subscriptions. These earned income activities target the market(s) for core services, but do not use the same
organizational technologies in their production. The mean for integrated-market is $342. For integrated-technology, I include earned income from contracted performances and royalties. These activities are integrated because they reflect the use of the same organizational technology as the core activities (or are the core activities, monetized), but do not target the same markets. The bulk of integrated revenue appears to be concentrated along the technology dimension, with integrated-technology showing a mean of $5,523. Both types of integrated revenue increased during the period of this study (integrated-market by $148, integrated-technology by $135), as shown in Table 17.

In addition to the summary statistics shown in Table 17, Table 18 describes variation between and within the independent earned revenue variables. The between values show the summary statistics for the averages for each organization, describing variation across organizations over time. The within values assess the statistics for the deviations of each organization from its own average for each time period, describing the variation of the earned revenue patterns of an observed organization over time. For example, the variation in integrated-market revenue across time ($3110) is similar to the variation in integrated-market observed within one organization over time ($2,164). By contrast, embedded revenue patterns average a standard deviation of $309,476 across time, but the variation observed within an organization averages a standard deviation of $35,321.

To summarize the independent variables, I start by looking total earned revenue, and then break this variable into various component parts. The first division is embedded earned income and nonembedded earned income. Nonembedded earned income then gets separated into integrated earned income and external earned income. Lastly,
integrated earned income is separated along dimensions of embeddedness into integrated-market revenue and integrated-technology revenue.

**Control Variables: Donated Income, Government Income, Investment Income, Revenue Diversification, & Size**

In order to isolate the effects of earned revenue on service delivery, I control for other variables that vary by organization over time, including nine\(^{14}\) types of non-earned revenue, the revenue diversification of each organization’s financial portfolio, and other time-varying organizational characteristics. The different sources of non-earned revenue are collapsed into three categories: government income, donation income, and investment (Young, Wilsker and Grinsfelder 2010), *Government income* includes city, county, state, and federal contributions. As shown in Table 17, the mean for government income is $21,680, and decreased over time by $1,137. Contributions from individuals, board/trustees, corporations, foundations, and other (non-specified) sources make up *donation income*. This income stream has a mean of $105,327, making it the primary source of income in this sample. However, this stream, too, is decreasing, showing a drop of $14,279 over the four years of this study. *Investment income* aggregates revenue from realized gains and losses, unrealized gains/losses, interest and dividends. The mean for this type of income is $5,693, and income from this stream dropped significantly over time (falling $15,914 from 2007 to 2010).

Revenue diversification may serve as a measure for organizational stability and increased control over income deployment (Froelich 1999; Carroll and Slater 2009;)

---

\(^{14}\) The CDP data includes data on income from tribal, other contrib., parent org. support., related org., and in-kind sources, but revenue from these streams is negligible. Because these variables were not shown to have significance, they have been omitted from the models.
More control over income deployment would presumably make program spending a priority, so the relationship between revenue diversification and service delivery is expected to be positive. However, as Frumkin and Keating (2011) demonstrate, less diversification may benefit the organization by lowering administrative and fundraising expenses, potentially freeing more funding for programs. Conversely, more diversification may increase spending in both areas, leading to less spending on programs and demonstrating the relationship between revenue diversification and service delivery may be positive or negative. To control for these effects, 

\textit{revenue diversification} is operationalized based on the concept of a Herfindahl-Hirschman Index (Chang and Tuckman 1994; Young, et al. 2010). The proportion of each stream (relative to total income) is squared. The sum of the squares is subtracted from 1 and used to represent diversification, where 0 is total concentration and 1 is total diversification. As Table 17 shows, organizations in this sample are relatively diversified, with a mean HHI of 0.741, though this mean did fall marginally over time (by 0.007 during the 4 years covered in this study).

Larger organizations may have more capacity to diversify and allocate resources to earned revenue activities\textsuperscript{15}. To control for this, size is accounted for using staff size by organization and year (captured as full-time equivalents, or FTEs). Organizations show an FTE mean of 10.384, with a slight decrease of .218 over time.

\textsuperscript{15} Location may also affect earned income and service delivery trends, and was controlled for in the OLS models. However, since the location is (presumed to be) constant, this control was dropped from the fixed effects models.
<table>
<thead>
<tr>
<th>Summary Statistics</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Change from 2007-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Expenses*</td>
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<td>14.855</td>
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<tr>
<td>Total Free Attendance*</td>
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<td>Integrated-Tech Revenue*</td>
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<td>69.831</td>
<td>0</td>
<td>3246.714</td>
<td>0.135</td>
</tr>
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<td>External Revenue*</td>
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* = measured in 1000s

Table 17 Summary Statistics for all Variables
Table 18: Overall and Between-Variable Variations in Earned Revenue Variables

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<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Observations</th>
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<td>7542.928</td>
</tr>
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<td></td>
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<td>0</td>
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<tr>
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<td>-971.998</td>
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<td>144.551</td>
<td>0</td>
<td>3925.600</td>
</tr>
<tr>
<td></td>
<td>between</td>
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<td>0</td>
<td>3765.890</td>
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</tr>
<tr>
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<td>within</td>
<td>36.214</td>
<td>-776.726</td>
<td>1020.068</td>
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<td>Integrated-Tot Revenue</td>
<td>overall</td>
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<td>0</td>
<td>3246.714</td>
</tr>
<tr>
<td></td>
<td>between</td>
<td>69.549</td>
<td>0</td>
<td>3083.728</td>
<td>n = 2115</td>
</tr>
<tr>
<td></td>
<td>within</td>
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<td>247.182</td>
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<tr>
<td>Integrated- Market Revenue</td>
<td>overall</td>
<td>0.342</td>
<td>3.788</td>
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<td>Integrated- Technology Revenue</td>
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<td>69.831</td>
<td>0</td>
<td>3246.714</td>
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<td>0</td>
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<tr>
<td>External Revenue</td>
<td>overall</td>
<td>24.686</td>
<td>115.261</td>
<td>0</td>
<td>2303.595</td>
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<tr>
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<td>within</td>
<td>35.909</td>
<td>-780.976</td>
<td>1077.484</td>
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</tbody>
</table>

This paper uses a fixed effects model to explore the relationship between earned income and mission activities, as specified below:

\[
\text{SERVICE DELIVERY}_{it} = (\alpha + u_i) + \beta_1 \text{EARNED REVENUE} + \beta_2 \text{REVENUE DIVERSIFICATION} + \beta_3 \text{GOVERNMENT INCOME} + \beta_4 \text{DONATED INCOME} + \beta_5 \text{INVESTMENT INCOME} + \beta_6 \text{SIZE} + \epsilon_{it}
\]

where SERVICE DELIVERY represents the vector of dependent variables, i = each organization in the sample, and t represents the respective year for the observation between 2007-2010.

SERVICE DELIVERY is represented by five different dependent variables: program expenses, program expense ratio, total attendance, total free attendance, and free
attendance ratio. I estimate a stepwise regression, adding additional independent variables with each iteration. Initially, EARNED REVENUE is included as total earned revenue. In the next iteration, EARNED REVENUE is separated into embedded and nonembedded revenue variables. EARNED REVENUE is subsequently separated into embedded, integrated, and external revenue. In the last iteration, EARNED REVENUE represents embedded, integrated-market, integrated-technology, and external revenue variables. Each specification is run twice, once controlling for REVENUE DIVERSIFICATION and once without this control.
RESULTS

Program Spending

Earned Revenue and Program Expenses

As Table 19 demonstrates, earned revenue is significantly associated with program expenses (total dollars spent on programs) – almost all types of earned revenue are positively related with total program expenses. Model 1 shows that a $1,000 increase in total earned revenue is related to a $414 increase in program spending. When revenue diversification is controlled for (Model 2), a $1000 increase in total earned revenue is related to a $411 increase in program spending.

When earned revenue is broken down into embedded and nonembedded revenue, both types are still positively related to program spending. A $1,000 increase in embedded revenue is related to a $756 increase in program revenue in Model 3. In Model 4, a $1,000 increase in nonembedded revenue is related to a $90 dollar increase in program revenue when controlling for revenue diversification. While both show a positive association, embedded revenue has a measurably larger effect on program spending than nonembedded revenue.

Breaking nonembedded revenue integrated and external components shows that each type may effect service delivery differently. Embedded revenue is still positively associated with program expenses: a $1,000 increase is associated with a $760 in program expenses (Model 5), and a $756 increase in program expenses when controlling for revenue diversification (Model 6). External revenue is also positively associated with program expenses – a $1,000 increase is associated with $117 in increased program
expenses (Model 5), or $114 increase when controlling for revenue diversification (Model 6).

By contrast, total integrated revenue shows a negative relationship with program expenses. That is, a $1,000 increase in total integrated revenue is associated with $794 decrease in program expenses (Model 5). When controlling for revenue diversification, a $1,000 increase in total integrated revenue is associated with a $799 decrease in program expenses (Model 6). Models 7 and 8 explore the effect of the two different dimensions of integrated revenue: integrated-market and integrated-technology. In both models, integrated-market revenue is positively associated with program expenses. For a $1,000 increase in this revenue type, program expenses increase by $1523 (Model 7), and they increase by $1497 when controlling for revenue diversification. However, integrated-technology revenue is negatively related to program spending. Model 7 shows a $1,000 increase in this revenue type is associated with a $1,020 decrease in program expenses. When revenue diversification is controlled for (Model 8), the decrease in program expenses measures $1022.

Revenue diversification is negatively related to program spending – i.e., as the number of revenue types increases and the Herfindahl-Hirschman Index measuring revenue diversification, program expenses show a decrease across all models, regardless of how earned revenue is specified. When earned revenue is measured as total earned revenue (Model 2), a one-unit increase in is associated with a decrease in program expenses of $149,785. The effect is similar when earned revenue is represented in Model 4 as embedded and nonembedded earned revenue – the decrease in program expenses is $138,976. Measuring earned revenue as embedded, integrated-total, and external still
reflects a negative relationship between revenue diversification and program expenses, as
the latter decreases by $141,029 with a one-unit HHI increase, i.e.: as organizations adopt
additional income streams and become more diversified. Further disseminating earned
revenue into embedded, integrated-market, integrated-technology, and external streams
reflects a similar relationship, with program expenses decrease by $135,504 as HHI
increases by one unit. While the income stability that revenue diversification, or multiple
sources for income, may offer an organization may be beneficial for organizations, per
scholars such as Carroll and Slater (2009), these findings show that act of diversification
itself may not necessarily result in additional resources being directed specifically toward
service delivery.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
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<td>0.411***</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Earned Revenue</td>
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<td>0.756***</td>
<td>0.760***</td>
<td>0.765***</td>
<td>0.766***</td>
<td>0.767***</td>
<td>0.768***</td>
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<td>0.087***</td>
<td>0.084***</td>
<td>0.081***</td>
<td>0.080***</td>
<td>0.079***</td>
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<tr>
<td>Nonembedded Revenue</td>
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<td>-0.749***</td>
<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
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<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
<td>-0.743***</td>
<td>-0.742***</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>0.090***</td>
<td>0.087***</td>
<td>0.084***</td>
<td>0.081***</td>
<td>0.080***</td>
<td>0.079***</td>
<td>0.078***</td>
<td>0.077***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.749***</td>
<td>-0.749***</td>
<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
<td>-0.743***</td>
<td>-0.742***</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>0.090***</td>
<td>0.087***</td>
<td>0.084***</td>
<td>0.081***</td>
<td>0.080***</td>
<td>0.079***</td>
<td>0.078***</td>
<td>0.077***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.749***</td>
<td>-0.749***</td>
<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
<td>-0.743***</td>
<td>-0.742***</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>0.090***</td>
<td>0.087***</td>
<td>0.084***</td>
<td>0.081***</td>
<td>0.080***</td>
<td>0.079***</td>
<td>0.078***</td>
<td>0.077***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.749***</td>
<td>-0.749***</td>
<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
<td>-0.743***</td>
<td>-0.742***</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>0.090***</td>
<td>0.087***</td>
<td>0.084***</td>
<td>0.081***</td>
<td>0.080***</td>
<td>0.079***</td>
<td>0.078***</td>
<td>0.077***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.749***</td>
<td>-0.749***</td>
<td>-0.747***</td>
<td>-0.746***</td>
<td>-0.745***</td>
<td>-0.744***</td>
<td>-0.743***</td>
<td>-0.742***</td>
</tr>
</tbody>
</table>

**Note:** R-sq: within 0.099 0.100 0.135 0.136 0.135 0.136 0.141 0.142
between 0.756 0.756 0.678 0.674 0.673 0.666 0.567 0.567
overall 0.735 0.735 0.664 0.660 0.656 0.641 0.556 0.556

corr(u_i, Xb) 0.743 0.743 0.566 0.566 0.566 0.566 0.566 0.566

F F(5,6098)=133.76 F(6,6097)=11 F(6,6097)=158.54 F(7,6096)=136.86 F(7,6096)=142.54 F(8,6095)=125.6 F(8,6095)=128.47 F(9,6094)=114.92

Prob > F 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000

sigma_u 4390.743 4413.198 4056.991 4077.383 4280.825 4301.538 4336.126 4355.363
sigma_e 971.639 971.187 952.040 951.651 948.980 948.575 947.048 946.680

df of variance due to u i 2.789 2.789 2.789 2.789 2.789 2.789 2.789 2.789

***p<.01, **p<.05, *p<.01

Table 19 Fixed Effects Regression Results: Estimating the Effects of Earned Revenue on Program Expenses, 2007-2010
**Earned Revenue and Program Expense Ratios**

Next, program volume is measured as the ratio of program expenses to total expenses (the program expense ratio). Since the dependent variable is a ratio, income and size variables have been logged in order to normalize their distributions and capture their effects on the ratio. As Table 20 demonstrates, earned revenue appears to have some statistically significant relationships with program expense ratios. Total earned revenue is significant and positively related. A 1% increase in total earned revenue is associated with an increase in the program expense ratio of .022%.\(^{16}\) Embedded revenue shows a similar relationship across all models. Nonembedded revenue is also positively related (Model 3 and Model 4), as is integrated-market revenue (Model and Model 8). The effect size is even smaller than that of total earned revenue and Embedded Revenue. For example, a 1% change in integrated-market revenue is associated with an increase in the program expense ratio of 0.008%. In order to see a 1% change in program expense ratio (i.e.: to shift the ratio from 72% to 73%), total earned revenue would need to increase by approximately 454%.

However, even though embedded revenue and integrated-market revenue show a positive relationship, indicating a larger share of every dollar gets allocated to programs when these revenues increase, revenue diversification itself shows a negative relationship – a 1% increase in the HHI index measuring revenue diversification is associated with a decrease in the program expense ratio ranging from 0.047% (Model 2 and Model 6) to 0.05% (Model 4). This could mean that the positive effects of the embedded and

---

\(^{16}\) When interpreting a linear-log model, the coefficient of the logged variable must be divided by 100 in order to determine effect size.
integrated revenue streams may be nullified by the negative effect of the act of revenue diversification in the first place.
<table>
<thead>
<tr>
<th>Program Expense Ratio (Income and Size Variables Logged)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>0.022***</td>
<td>0.023***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>0.023***</td>
<td>0.023***</td>
<td>0.021***</td>
<td>0.021***</td>
<td>0.021***</td>
<td>0.022***</td>
<td>0.021***</td>
<td>0.022***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>0.005**</td>
<td>0.006***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td>0.004**</td>
<td>0.004**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td>0.008**</td>
<td>0.008**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td>0.003</td>
<td>0.003*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Revenue</td>
<td></td>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>-0.047**</td>
<td>-0.050***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Income</td>
<td>0.004*</td>
<td>0.004**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donation Income</td>
<td>-0.009***</td>
<td>-0.010***</td>
<td>-0.010***</td>
<td>-0.009***</td>
<td>-0.010***</td>
<td>-0.009***</td>
<td>-0.011***</td>
<td>-0.011***</td>
</tr>
<tr>
<td>Investment Income</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
</tr>
<tr>
<td>Size (FTE)</td>
<td>-0.009</td>
<td>-0.009</td>
<td>-0.012*</td>
<td>-0.012*</td>
<td>-0.012*</td>
<td>-0.012*</td>
<td>-0.012*</td>
<td>-0.012*</td>
</tr>
</tbody>
</table>

\[ n=4250 \text{ (1287 groups)} \]

<table>
<thead>
<tr>
<th>R-sq: within</th>
<th>0.020</th>
<th>0.022</th>
<th>0.027</th>
<th>0.029</th>
<th>0.026</th>
<th>0.028</th>
<th>0.028</th>
<th>0.030</th>
</tr>
</thead>
<tbody>
<tr>
<td>between</td>
<td>0.010</td>
<td>0.015</td>
<td>0.001</td>
<td>0.003</td>
<td>0.003</td>
<td>0.005</td>
<td>0.002</td>
<td>0.005</td>
</tr>
<tr>
<td>overall</td>
<td>0.010</td>
<td>0.014</td>
<td>0.003</td>
<td>0.005</td>
<td>0.005</td>
<td>0.008</td>
<td>0.003</td>
<td>0.005</td>
</tr>
</tbody>
</table>

| corr(u_i, Xb) | -0.115 | -0.107 | -0.242 | -0.231 | -0.2176 | -0.207 | -0.236 | -0.225 |

<table>
<thead>
<tr>
<th>Prob &gt; F</th>
<th>F(5,2958) = 12.27</th>
<th>F(6,2957) = 11.27</th>
<th>F(7,2956) = 12.66</th>
<th>F(7,2956) = 11.45</th>
<th>F(8,2955) = 10.82</th>
<th>F(8,2955) = 10.44</th>
<th>F(9,2954) = 9.99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob &gt; F</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>sigma_u</td>
<td>0.139</td>
<td>0.139</td>
<td>0.144</td>
<td>0.143</td>
<td>0.143</td>
<td>0.142</td>
<td>0.144</td>
</tr>
<tr>
<td>sigma_e</td>
<td>0.080</td>
<td>0.080</td>
<td>0.079</td>
<td>0.079</td>
<td>0.079</td>
<td>0.079</td>
<td>0.079</td>
</tr>
<tr>
<td>( \rho ) (fraction of variance due to u_i)</td>
<td>0.754</td>
<td>0.753</td>
<td>0.766</td>
<td>0.765</td>
<td>0.763</td>
<td>0.762</td>
<td>0.766</td>
</tr>
</tbody>
</table>

**p<.01, *p<.05, **p<.01

Table 20 Fixed Effects Regression Results Estimating the Effects of Earned Revenue on Program Expense Ratios, 2007-2010
Total Attendance

Earned Revenue and Total Attendance

As Table 21 demonstrates, earned revenue showed no statistically significant relationship with total attendance, no matter how earned revenue was measured (total, or its component parts). Further, revenue diversification also shows no statistically significant effect.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Attendance (1000s)</td>
<td>-0.007</td>
<td>-0.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td></td>
<td></td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td></td>
<td></td>
<td>-0.012</td>
<td>-0.012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td></td>
<td></td>
<td>-0.065</td>
<td>-0.064</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td></td>
<td></td>
<td>-0.074</td>
<td>-0.070</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td></td>
<td></td>
<td>-0.064</td>
<td>-0.064</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Revenue</td>
<td></td>
<td></td>
<td>-0.011</td>
<td>-0.010</td>
<td>-0.011</td>
<td>-0.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>20.415</td>
<td>20.596</td>
<td>20.469</td>
<td>20.455</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Income</td>
<td>-0.003</td>
<td></td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td>Donation Income</td>
<td>0.000</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Investment Income</td>
<td>0.000</td>
<td></td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>Size (FTE)</td>
<td>2.091</td>
<td>2.090</td>
<td>2.064</td>
<td>2.063</td>
<td>2.052</td>
<td>2.052</td>
<td>2.053</td>
<td>2.052</td>
</tr>
</tbody>
</table>

n=8460 (2115 groups)

- R-sq: within: 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
- between: 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002
- overall: 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001

- corr(u_i, Xb): 0.018 0.017 0.012 0.011 -0.014 -0.013 -0.014 -0.013

- sigma_e: 2062.326 2062.485 2062.487 2062.645 2062.644 2062.803 2062.807 2062.965
- rho (fraction of variance due to u_i): 0.467 0.467 0.467 0.467 0.467 0.467 0.467 0.467

***p<.01, **p<.05, *p<.01

Table 21 Fixed Effects Regression Results Estimating the Effects of Earned Revenue on Total Program Attendance, 2007-2010
Program Access

Earned Revenue and Program Access

As Table 22 demonstrates, earned revenue showed no statistically significant relationship with free attendance, no matter how earned revenue was measured (total, or its component parts). Revenue diversification also shows no effect.
<table>
<thead>
<tr>
<th>Total Free Attendance (1000s)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>-0.017</td>
<td>-0.017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>-0.018</td>
<td>-0.017</td>
<td>-0.018</td>
<td>-0.017</td>
<td>-0.017</td>
<td>-0.018</td>
<td>-0.017</td>
<td>-0.017</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.016</td>
<td>-0.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td></td>
<td></td>
<td>-0.064</td>
<td>-0.063</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td></td>
<td></td>
<td></td>
<td>-0.090</td>
<td>-0.086</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td></td>
<td></td>
<td></td>
<td>-0.062</td>
<td>-0.061</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Revenue</td>
<td></td>
<td></td>
<td>-0.015</td>
<td>-0.014</td>
<td>-0.015</td>
<td>-0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>19.003</td>
<td>18.979</td>
<td>18.863</td>
<td>18.863</td>
<td>18.808</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Income</td>
<td>-0.004</td>
<td>-0.003</td>
<td>-0.004</td>
<td>-0.003</td>
<td>-0.004</td>
<td>-0.004</td>
<td>-0.004</td>
<td>-0.004</td>
</tr>
<tr>
<td>Donation Income</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td>Investment Income</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>Size (FTE)</td>
<td>2.243</td>
<td>2.242</td>
<td>2.247</td>
<td>2.246</td>
<td>2.236</td>
<td>2.235</td>
<td>2.237</td>
<td>2.236</td>
</tr>
</tbody>
</table>

**Table 22:** Fixed Effects Regression Results Estimating the Effects of Earned Revenue on Total Free Attendance, 2007-2010

***p<.01, **p<.05, *p<.01
Earned Revenue and Free Attendance Ratio

The final dependent variable considered is the ratio of free attendance to total attendance. Since the dependent variable in question is a ratio, income and size variables have been logged in order to normalize their distributions and capture their effects on the ratio. As Table 23 demonstrates, earned revenue appears to have some statistically significant relationships with the proportion of people using free services. All earned revenue forms are negative. A 1% increase in total earned revenue is associated with a decrease in the free attendance ratio of 0.037% (Model 1), and is associated with a decrease in the free attendance ratio of 0.038% when controlling for revenue diversification. Embedded revenue has the same negative, statistically significant relationship and effect size across all models. In addition, integrated-total and both component parts (integrated-market and integrated-technology) are also negatively related to the free attendance ratio. A 1% increase in integrated-market revenue is associated with a decrease in the Free Attendance Ratio of 0.012%, while a 1% increase in integrated-technology revenue is associated with a decrease in the Free Attendance Ratio of 0.006% (0.007% when controlling for revenue diversification), as shown in Table 23. These results are not unexpected given the nature of earned revenue. Given that not all organizations focus on free/reduced cost service delivery, this finding alone does not necessarily indicate that earned revenue is a substitute, but bears further study.

However, even though embedded and integrated revenue show a negative relationship, indicating a smaller share service recipients receive free services when revenues increase, revenue diversification itself shows a positive relationship, where a 1% increase in revenue diversification is associated with an increase in the Free
Attendance Ratio of .046\% (Model 4, the only model in which this relationship was statistically significant). This finding may be mean that revenue diversification itself does not distract from free service delivery, so organizations may find the pursuit of additional income worthwhile, but the nature of this additional income must be considered in the context of core missions.
<table>
<thead>
<tr>
<th>Free Attendance Ratio (Income and Size Variables Logged)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.038***</td>
<td>-0.038***</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>-0.037***</td>
<td>-0.037***</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.037***</td>
<td>-0.038***</td>
<td>-0.038***</td>
<td>-0.038***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>-0.008***</td>
<td>-0.009***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
<td>-0.007***</td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td>-0.007**</td>
<td>-0.007**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td>-0.006**</td>
<td>-0.007**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
<td>-0.012**</td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td>-0.001</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.002</td>
</tr>
<tr>
<td>External Revenue</td>
<td>0.034</td>
<td>0.046*</td>
<td>0.034</td>
<td>0.046*</td>
<td>0.034</td>
<td>0.046*</td>
<td>0.034</td>
<td>0.046*</td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.008***</td>
</tr>
<tr>
<td>Government Income</td>
<td>0.009***</td>
<td>0.008***</td>
<td>0.008***</td>
<td>0.007***</td>
<td>0.007***</td>
<td>0.007***</td>
<td>0.007***</td>
<td>0.007***</td>
</tr>
<tr>
<td>Donation Income</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Investment Income</td>
<td>-0.005</td>
<td>-0.005</td>
<td>-0.006*</td>
<td>-0.006*</td>
<td>-0.006*</td>
<td>-0.006*</td>
<td>-0.006*</td>
<td>-0.006*</td>
</tr>
<tr>
<td>Size (FTE)</td>
<td>-0.014</td>
<td>-0.014</td>
<td>-0.011</td>
<td>-0.011</td>
<td>-0.012</td>
<td>-0.012</td>
<td>-0.012</td>
<td>-0.012</td>
</tr>
</tbody>
</table>

7566 observations (2098 groups)

R-sq: within 0.016 0.017 0.022 0.023 0.022 0.022 0.022 0.023
between 0.078 0.073 0.167 0.160 0.172 0.165 0.163 0.157
overall 0.077 0.073 0.164 0.157 0.168 0.162 0.160 0.154

corr(u_i, Xb) 0.056 0.046 0.152 0.141 0.173 0.163 0.159 0.148

F = 17.89 F(5,5463) = 15.25 F(6,5462) = 20.30
Prob > F 0.000 0.000 0.000

sigma_u 0.338 0.339 0.324 0.325 0.324 0.325 0.326
sigma_e 0.142 0.142 0.142 0.142 0.142 0.142 0.142
rho (fraction of variance due to u_i) 0.850 0.851 0.839 0.840 0.839 0.840 0.840 0.841

Table 23 Fixed Effects Regression Results Estimating the Effects of Earned Revenue on the Free Attendance Ratio, 2007-2010
DISCUSSION

Embeddedness matters. This analysis, as summarized in Table 24, demonstrates a connection between embedded revenue, integrated revenue, and service delivery. Embedded revenue may support service volume, specifically, program spending. The magnitude of the effect is evident when it comes to total dollars spent on programming. However, though embedded revenue has a positive relationship with the program expense ratio, there appears to be little change in program expense ratio within an organization over time. Therefore changes in earned income within a given organization are not likely to substantially impact this ratio. For example, in order to see a 1% change in program expense ratio (i.e.: to shift the ratio from 72% to 73%), embedded earned income would need to increase by approximately 454%. This suggests that while organizations may increase spending on program expenses when they have more embedded earned income, they also increase spending on administrative and fundraising expenses at the same rate (i.e., they do not divert a greater proportion of additional embedded earned dollars to program expenses).

Additionally, embedded revenue is negatively related to service composition, i.e.: those consuming the service for free. Intuitively, this makes sense because an organization pursuing paying customers is most likely diverting resources away from free programs/services. This may not be at odds with an organization’s charitable mission if the mission is, for example, education or preservation, rather than access. However, this effect on service composition is important for organizations to be aware of when considering earned revenue ventures.
In contrast to the overall positive effects of embedded earned income, this study finds that integrated earned income (specifically, integrated on the technology) may actually reduce charitable mission-related services, particularly when measured as total program spending. Maximizing cost complementarities (e.g.: using the existing technology for a non-mission related service) is a rationale offered as a motivation to pursue integrated-technology revenue. However, these activities may end up adversely affecting the very service-related activities the organization is trying to support. This relationship may reflect the fact that using the same inputs to deliver multiple outputs has the potential to degrade each output, or distract the organization from its original mission focus.

Conversely, offering new products/services to core markets (integrated on target market but different on technology) may offer avenues through which organizations can support their core services. An increase in integrated earned income is associated with an increase in program spending. This suggests that a more nuanced understanding of integrated income is important; it is not simply about embedded or external. Rather, the specific dimensions on which earned income activities are embedded (technology or market) have different implications. This is particularly important as integrated revenue may not be easy to shut down (given their integration with the core organization) should they turn out to have a negative impact on service delivery.
<table>
<thead>
<tr>
<th><strong>Embedded Revenue</strong> (same org. tech <em>and</em> same target market)</th>
<th>Service – Volume (money spent on programs, people attending)</th>
<th>Service – Composition (clients attending for free)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1A: + SUPPORTED for program spending</td>
<td>H1B: - SUPPORTED for % attending free</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>External Revenue</strong> (different org. tech. <em>and</em> different target market)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H2A: - Not supported</td>
<td>H2B: - Not supported</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Integrated Revenue</strong> (same org tech. or same target market)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative relationship, specifically for integrated-tech</td>
<td>Negative Relationship, specifically for integrated-tech activities</td>
<td></td>
</tr>
</tbody>
</table>

Table 24 Summary of Key Findings

---

**Limitations**

This study has several limitations. The first limitation is the specification of the variables. While the theory may be precise, the application of the embeddedness dimensions is a less than perfect in practice and requires subjective classification. Even though this study controls for subsector by only looking at arts and culture, these organizations are not homogenous, and do not all have the same mission. Some focus on theatre performances, others on cultural preservation, still others on research and education, and so on. For the purpose of this study, all earned revenue types were classified as a whole as embedded, integrated or external. However, it may be that a particular source of earned income is embedded for one organization, and integrated or external for a different organization.
For example, some arts organizations create media to sell, while others use media to support core activities. This means that one organization’s media subscriptions may be integrated (as categorized in this paper) because it targets different paying customers outside of its client base. However, another organization’s media subscriptions could be embedded because the material produced is exclusively available to clients who also consume core services. Further refinement is necessary, included but not limited to an exploration of unrelated business income tax (UBIT) language and practices. In addition, the consideration of income share thresholds may be appropriate – i.e., in cases where a revenue-generating activity could be considered embedded or integrated, the deciding factor could be the share of total income the activity represents. I am unable to capture this nuance in this paper. This also underscores the difficulty in interpreting the impact of earned revenue on access. If an organization’s mission focuses on something other than providing free-to-low cost services to the public, an insignificant or negative association with access may not be relevant for an organization considering an earned income activity.

In addition to specifying the variables more precisely, the models need to be developed more fully. One the one hand, these models presume that earned revenue is the independent variable. In fact, the service delivery outcome may be the independent variable that influences and affects the adoption of certain revenue strategies (Segal and Weisbrod 1998, Young, Wilsker and Grisnfelder 2010). This analysis therefore cannot assert causality or directionality, given that both income changes and service outcomes move together simultaneously. The directionality of these relationships needs further exploration.
Lastly, the time period in this study needs to be expanded. The years 2007-2010 span unusual economic activity, including the Great Recession, that may have influenced both the adoption and size effects of various revenue activities on service delivery. Including more years in the panel data would help address the question of whether the demonstrated relationships reflect reaction to unique constraints or are indicative of more long-standing trends.

Despite these limitations, this study aims to add nuance to the discussion of earned revenue in the nonprofit sector by offering and testing a framework for analyzing the connections between mission- and market-driven activities.

CONCLUSION

The goal of this study was to explore how changes in earned revenue activities may be related to charitable mission, as represented by service delivery, in nonprofit organizations. While many authors have explored the relationship between earned revenue and other financial aspects of an organization, few empirical studies have looked specifically at the effects of earned revenue and service-related outcomes. Those that do exist tend to group all earned income together, or as an aggregate program service revenue variable. In addition, the service-related outcome variables tend to be financial, as well, such as program spending. Using the framework of embeddedness, I find the nature of each earned revenue activity matters when it comes to its effect on service-level outcomes.

Theories have diverged regarding whether earned revenue complements or substitutes for charitable mission-related service delivery. In her broad literature review, Froelich (1999) theorizes earned revenue can help nonprofits reduce organizational
reliance on, and, thus, vulnerability to, income uncertainties and the priorities of resource providers that may not align with the organization’s own focus. As part of a diversified revenue strategy, earned income is hypothesized to increase mission related outcomes, an outcome borne out by Hughes and Luksetich’s 2004 study. On the other hand, Sloan’s (1998) comparison of for-profit and nonprofit hospitals shows that hospitals that increase their earned revenue activities may do so at the expense of public service provision such as uncompensated care, demonstrating a potential substitution effect. Part of the reason for the mixed findings may have to do with how earned revenue has been operationalized in prior literature, as an aggregate measure.

By linking earned revenue activities to an organization’s core mission activities through the dimensions of organizational technology and target markets, I demonstrate that different activities have different effects on charitable mission. Specifically, embedded revenue may be related to the increase in program volume measures such as program spending. By contrast, integrated revenue activities, especially those integrated on the technology dimension, are negatively related to both service volume and service composition. Organizations tempted to maximize the cost complementarities afforded by using the same inputs for multiple programs or services might end up generating revenue at the expense of their charitable missions, rather than in their support. Organizations looking to pursue new sources of earned revenue can use this framework to help in their decision-making process by considering how the activity will complement core mission-related activities. This study demonstrates the nature of the earned income activity matters. Using existing technologies to deliver new goods and services may ultimately
damage charitable mission, while offering new goods/services may be able to complement certain mission-related service-level outcomes.

As has been noted, this work focuses primarily on arts and culture organizations. The overlap between targeted clients, paying customers, and donors allows for the consideration of, for example, the source of support for core services, the likelihood of the same audiences giving the organization in multiple ways (i.e.: through the purchase of a service and through a donation), and the potential effects of resource diversion.

However, while theory offers a place to start when considering effects, there is no way to know what actually is happening. In addition, the findings of this study may not be applicable in subsectors where the client, customer, and donor audiences are clearly differentiated. Next steps for this study include a qualitative exploration of organizational decision-making behavior to explore the rationale behind the adoption of earned revenue activities, as well as to see if the theories behind the connection between embeddedness and donated income hold true. In addition, I would like to begin applying of the embeddedness framework to other types of organizations in the nonprofit sector.

Regardless, at least for arts and culture organizations, the connections between the nature of an organization’s earned revenue stream, its charitable mission and its service delivery matters, and the embeddedness framework can help shed light on these relationships.
Chapter 5: Mission-Based Objectives, Market-Based Funding- Discussing the Relationship between Earned Revenue and Charitable Mission

My goals were to develop a more robust measure of earned revenue that connects income stream to organizational performance, and to evaluate the relationship between earned revenue and charitable mission. My contributions from this work include the embeddedness matrix and an initial analysis assessing the effects of earned revenue on charitable mission (as measured by donated income and service-level outputs) that contributes to both theory and practice.

Key Findings

With this work, I attempted to address previous shortcomings and enhance the understanding of the connection between revenue and mission by using data that includes information on both revenue variables and program level outputs, directly linking earned revenue to activities related to charitable mission. The arts and culture subsector offers context in which to explore the relationship for two reasons: the overlap between clients, customers, and donors looking to both support and receive the benefits of these organizations’ charitable missions, as well as the subsector’s reliance on both earned revenue and donated income.

Chapter 2 demonstrates some of the data issues by comparing the different pictures depicted by data from three sources: the IRS Core File, the IRS Statistics of...
Income (SOI file) and the Cultural Data Project data. The IRS Core file includes financial information about every nonprofit organization filing a Form 990. It has breadth in terms of organizations covered, but limited depth in terms of information available. By contrast, the IRS SOI file is limited to larger organizations, but has more depth in terms of the detailed financial information that is made available. Given the nature of this sample, with its more robust revenue variables, the SOI file may present a revenue picture that is closer to what is happening in the field. However, neither data set includes information about program or service-level outputs (i.e.: number of clients served), so it not ideal for assessing the effects of earned revenue on charitable mission.

The data available through the Cultural Data Project (CDP) is based on audits and/or year-end reports that include contributed goods/services, allocation of joint costs across expense categories, and show distinction between restricted and unrestricted revenue and balance sheet items. It lists 36 income variables and includes information on program-level charitable mission activities such as service volume and access. This element of program-level information makes this data better suited to exploring the relationship between earned revenue and charitable mission.

Chapter 3 and chapter 4 build on Alter’s (2004) enterprise typology to consider the extent to which different sources of earned income are embedded within the mission of the organization based on two dimensions: 1) the organizational technology each uses to produce outputs; and 2) the markets each target. Based on this typology, earned revenue activities were sorted into three categories: embedded, external, and integrated. Embedded activities share both organizational technology and target markets with core activities. External activities and core mission-related activities have neither dimension
in common. Integrated activities share one dimension but not both, and so were assigned to sub categories of integrated-market and integrated-technology.

Two types of income - embedded and integrated - were significantly related to both conceptualizations of charitable mission: donated income (chapter 3) and service-level outcomes (chapter 4). As shown in chapter 3, the common denominator of earned revenue that may crowd out donated income is the organizational technology dimension. Regardless of market, i.e.: if the activity is fully embedded or integrated along technology but offered to a new market), using the same organizational inputs to create both core-related and earned-revenue services, donated income appears to be lower. Customers may perceive themselves as already supporting the organization through their purchase of goods/services, and not feel motivated to donate. The negative relationship between integrated revenue and mission was also evident in chapter 4, in which I examined the connection between earned revenue and charitable mission as represented by service-level outcomes. Integrated revenue activities, especially those integrated on the technology dimension, were negatively related to both service volume (i.e.: the number of people using programs/services) and composition (the number of people availing themselves of free programs/services). This could be a reflection of the negative effects of resource diversion, where organizational inputs previously used to produce one good/service are now being used to produce multiple goods/services.

While the relationship between integrated-technology revenue and charitable mission was consistent in both studies, the findings regarding the nature of the relationship between emebedded revenue and charitable mission were inconclusive. Embedded revenue is negatively related to donated income and service composition, but
has a positive relationship with program spending. If the organization engaged in this type of activity does not focus free access as its mission, the argument could be made that embedded revenue is still supporting the mission at the service level in some way.

Embedded and integrated income activities were related to both aspects of charitable mission discussed in this study, but I also found some additional relationships between other earned income streams and donated income. When the mission-driven and market-driven activities use the same organizational technologies, the market-driven revenue tends to become a substitute for charitable mission. However, offering something new - either to a new audience or to your mission-based audience, tended to act as a complement to mission. This relationship held for integrated-market activities where the target market for both mission-related and revenue-related activities overlapped as well as for external activities that shared no overlap in market.

By linking earned revenue activities to an organization’s core mission activities through the dimensions of organizational technology and target markets, I demonstrate that different activities have different effects on two dimensions of charitable mission: donated income and service-level outcomes. Organizations tempted to maximize the cost complementarities afforded by using the same inputs for multiple programs or services might end up generating revenue at the expense of their charitable missions - both in terms of resources collected and services delivered - rather than in their support.

Limitations

This work does have several limitations, including the relationship between the variables, the focus on arts and culture organizations, the specification of the variables, and the time period covered. In chapter 3, donated income is the dependent variable;
however, the relationship might work in the opposite direction because sources may be determined by the nature of goods and services produced (Wilsker, et al. 2011).

Similarly, in chapter 4, this study assumes contemporaneous timing of revenues and expenditures. In reality, expenditures, such as program spending, may precede revenue generation, thus affecting the relationship between charitable mission-driven activities and earned revenue activities.

The focus on arts and culture organizations is an advantage in terms of the context the subsector provides when examining overlap between clients, customers, and donors. This focus does narrow the application of the findings to this and other subsectors where similar relationships exist. No generalized conclusions can be drawn regarding human services organizations, for example, that have sharp distinctions between the donors who support the mission and the clients who avail themselves of services. However, the initial findings of this study may shed light on how to increase its generalizability. For example, extrapolating from the positive relationship found between external revenue and donated income, it might be that embedded and integrated revenue activities also have a positive relationship with donated income in the human services sector where donors are not also typically clients paying fees for services.

The specification of earned income activities is also a limitation because all activities are treated equally across all organizations in the sample. The application of the embeddedness dimensions is a less than perfect in practice and requires subjective classification. In reality, the same activity that is embedded at one organization may be integrated at another based on the latter’s specification of its mission. The embeddedness framework I propose starts the conversation of linking revenue to charitable mission, but
more nuance is needed to truly understand the relationships between these organizational aspects.

One last limitation involves the years covered in this work. The years 2007-2010 span unusual economic activity, including the Great Recession, that may have influenced both the adoption and size effects of various revenue activities on service delivery. Including more years in the panel data would help address the question of whether the demonstrated relationships reflect reaction to unique constraints or are indicative of more long-standing trends.

**Next Steps**

Next steps include expanding the subsectors studied, developing more nuanced decision rules to guide the classification of earned revenue activities, and adding a qualitative component to this work that can shed light on the organizational decision-making behind adopting earned revenue as well as the interactions between earned revenue, donated income, and mission-driven service delivery. Expanding the subsectors studied may offer opportunities for more generalized application of the embeddedness framework for two reasons. The differing relationships between clients, customers, and donors may change the effect(s) shared target markets have on the connection between earned revenue and charitable mission. Similarly, the variation in reliance of different subsectors on the various components of income (earned revenue, donated income, investment income) may also help expand generalizability.

This study focuses on the interactions between earned revenue and charitable mission once organizations are already in the process of pursuing the former. In order to complement this work, next steps for research include qualitative studies that explore
various facets of the relationship between earned revenue and charitable mission. These facts include why organizations choose to pursue this type of revenue in the first place, drawing on literature from organizational identity, decision-making, resource dependence, and institutional theory to explore the following questions: why do nonprofit organizations choose to pursue earned revenue in the marketplace (rather than, for example, donated revenue)? Furthermore, why do some organizations decide to pursue earned revenue that is fully connected to their mission-driven activities, while other organizations pursue earned revenue that is not connected to their mission? Additional questions to explore in further studies include the strategic management of the earned revenue activity vis-à-vis the mission, the perceived effects of earned revenue on charitable mission, and client-focused elements such as quality perceptions and satisfaction with service delivery.

I will also use a mixed methods approach to explore additional elements of embeddedness, the strategic nature of the pursuit of earned revenue, and additional outcome measures that will enhance the applicability of embeddedness across nonprofit subsectors. I have offered initial considerations for each dimension of embeddedness (organizational technology and target market). However, there are additional elements to consider within each. For example, an assessment of embeddedness could take into account the nature of the transaction - is the sale of the good/service ongoing, or is it a one-off deal? An ongoing transaction that continuously uses organizational resources could be considered embedded, where a one-off like the sale of a building might be considered external.
The degree to which an organization has internalized the adoption and implementation of an earned revenue activity may also have non-uniform effects on charitable mission. The locus of the decision to pursue an earned revenue activity can represent embeddedness - i.e.: an initiative developed internally may be considered embedded, while an initiative initiated by a stakeholder such as a board member may be considered external. Similarly, the degree to which an organization intentionally and strategically manages the initiative can also reflect the level of embeddedness between the revenue activity and charitable mission. An earned revenue activity to which an organization allocates ongoing human, physical and financial resources could be embedded, as could an activity that organization employees discuss specifically in terms of how it supports mission. An externally-initiated activity to which an organization pays lip service but does not manage intentionally could be considered external, leading to different effects on mission. At this time, it is impossible to say whether the strategic management, or lack thereof, of the activity is a third dimension of embeddedness to be added to the model, or if it is the interaction between embeddedness and management that affects outcomes. Regardless, exploring the organization’s orientation to and level of strategic management of the initiative could shed additional light on the expected effects between earned revenue and charitable mission.

In addition to adding nuance to the embeddedness decision rules and application, I intend to further enhance the conceptualization of charitable mission. In this work, charitable mission is represented by donated income and service level outputs. However, these measures do not reflect client perceptions or satisfaction levels. In the arts and culture sector, the overlap between donors, clients, and customers means a person
purchasing, for example, a ticket to an improve show is likely aware of the other ways in which the organization attempts to earn income. However, in a human service organization such as a food pantry, the client may not be aware of how the organization gets the necessary resources to deliver service, and may only be focused on the service itself. Incorporating target client and customer perceptions into the study may be able to further inform outcome measures that better reflect the variations in the effects of embedded, integrated, and external revenue activities on charitable mission.

**Contributions**

I set out to consider the relationship between earned income and charitable mission as related to donated income, and to introduce a more robust measure of earned revenue that links to service-level outcomes. I have contributed to the earned revenue literature by introducing a more nuanced measure of earned revenue that assesses the income-generating activity relative to the core mission activity based on organizational technology and target market.

By linking earned revenue activities to an organization’s core mission activities through the dimensions of organizational technology and target markets, I demonstrate that different activities have different effects on charitable mission. Organizations tempted to maximize the cost complementarities afforded by using the same inputs for multiple programs or services might end up generating revenue at the expense of their charitable missions, rather than in their support. Organizations looking to pursue new sources of earned revenue can use this framework to help in their decision-making process by considering how the activity will complement core mission-related activities.
In its current incarnation, the application of my findings is limited to nonprofit organizations, with a specific focus on the arts and culture subsector. Within this context, this study demonstrates the nature of the earned income activity matters. Using existing technologies to deliver new goods and services may ultimately damage charitable mission, while offering new goods/services may be able to complement certain mission-related service-level outcomes. At least for arts and culture organizations, the connections between the nature of an organization’s earned revenue stream, its charitable mission and its service delivery matters, and the embeddedness framework can help shed light on these relationships.
References


APPENDIX A: Detailed 2007 IRS Core File Income Summaries

Descriptive Statistics: All 501(c)3 Organizations in the IRS 2007 Core File

Percent of All Organizations Reporting this Type of Revenue, 2007

<table>
<thead>
<tr>
<th>Revenue Type</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>344875</td>
<td>73.54%</td>
<td>0.4411176</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>344875</td>
<td>49.77%</td>
<td>0.4999954</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>344875</td>
<td>22.18%</td>
<td>0.4154515</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>344875</td>
<td>11.54%</td>
<td>0.3194676</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>344875</td>
<td>7.17%</td>
<td>0.2580653</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>344875</td>
<td>4.41%</td>
<td>0.2053112</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>344875</td>
<td>28.72%</td>
<td>0.4524521</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>344875</td>
<td>83.87%</td>
<td>0.3678124</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>344875</td>
<td>70.95%</td>
<td>0.4540029</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>344875</td>
<td>9.70%</td>
<td>0.2959074</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>344875</td>
<td>28.89%</td>
<td>0.453269</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 25 Percent of All 501(c)3 Organizations Reporting Revenue Types in the 2007 IRS Core File

Revenue Overview

<table>
<thead>
<tr>
<th>Revenue Type</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>344875</td>
<td>2858315.00</td>
<td>67200000.00</td>
<td>19900000.00</td>
<td>29300000000.00</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>344875</td>
<td>2771932.00</td>
<td>67000000.00</td>
<td>-5919962.00</td>
<td>29300000000.00</td>
</tr>
<tr>
<td>Dues</td>
<td>344875</td>
<td>27960.00</td>
<td>788519.50</td>
<td>-27662.00</td>
<td>218000000.00</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>344875</td>
<td>17867.36</td>
<td>680471.40</td>
<td>50400000.00</td>
<td>205000000.00</td>
</tr>
<tr>
<td>Rental Income</td>
<td>344875</td>
<td>7922.11</td>
<td>265227.60</td>
<td>-8365261.00</td>
<td>84700000.00</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>344875</td>
<td>20065.27</td>
<td>2726844.00</td>
<td>41700000.00</td>
<td>132000000.00</td>
</tr>
<tr>
<td>Special Events</td>
<td>344875</td>
<td>12568.11</td>
<td>183648.10</td>
<td>-8808033.00</td>
<td>56200000.00</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>344875</td>
<td>949585.60</td>
<td>17500000.00</td>
<td>-7178605.00</td>
<td>460000000.00</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>344875</td>
<td>137904.70</td>
<td>3649530.00</td>
<td>13100000.00</td>
<td>97100000.00</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>344875</td>
<td>162561.00</td>
<td>122000000.00</td>
<td>86100000.00</td>
<td>600000000.00</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>344875</td>
<td>64532.64</td>
<td>1770146.00</td>
<td>12700000.00</td>
<td>314000000.00</td>
</tr>
</tbody>
</table>

Table 26 Summary Statistics of Revenue Streams for All 501(c)3 Organizations in the 2007 IRS Core File
Revenue Stream as % of Total Revenue 2007

<table>
<thead>
<tr>
<th></th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>344847</td>
<td>39.40%</td>
<td>21.19241</td>
<td>-12187.33</td>
<td>2169.25</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>344847</td>
<td>26.99%</td>
<td>0.5755436</td>
<td>-134.8</td>
<td>96.26445</td>
</tr>
<tr>
<td>Dues</td>
<td>344847</td>
<td>4.89%</td>
<td>2.115544</td>
<td>-844.375</td>
<td>720</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>344847</td>
<td>2.16%</td>
<td>0.917257</td>
<td>-58.69617</td>
<td>509.5</td>
</tr>
<tr>
<td>Rental Income</td>
<td>344847</td>
<td>0.62%</td>
<td>1.40974</td>
<td>-322.1364</td>
<td>612.0313</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>344847</td>
<td>0.65%</td>
<td>0.7510173</td>
<td>-132.4352</td>
<td>274.0917</td>
</tr>
<tr>
<td>Special Events</td>
<td>344847</td>
<td>4.09%</td>
<td>21.57703</td>
<td>-12187.33</td>
<td>3013.625</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>344847</td>
<td>52.50%</td>
<td>21.18436</td>
<td>-2162.5</td>
<td>12188.33</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>344847</td>
<td>62.65%</td>
<td>2.155587</td>
<td>-1094.047</td>
<td>323.1364</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>344847</td>
<td>38.43%</td>
<td>0.4864248</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>344847</td>
<td>22.41%</td>
<td>0.4169951</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>344847</td>
<td>10.00%</td>
<td>0.2999723</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>344847</td>
<td>3.60%</td>
<td>0.1862265</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>344847</td>
<td>32.15%</td>
<td>0.4670653</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>344847</td>
<td>2.00%</td>
<td>21.57703</td>
<td>-12187.33</td>
<td>3013.625</td>
</tr>
</tbody>
</table>

Table 27: Revenue Stream as % of Total Revenue for all 501(c)3 Organizations in the 2007 IRS Core File

Descriptive Statistics: Arts and Culture 501(c)3 Organizations in the IRS 2007 Core File

Percent of Arts Organizations Reporting this Type of Revenue, 2007

<table>
<thead>
<tr>
<th></th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>37889</td>
<td>83.80%</td>
<td>0.368431</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>37889</td>
<td>62.65%</td>
<td>0.4837496</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>37889</td>
<td>38.43%</td>
<td>0.4864248</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>37889</td>
<td>22.41%</td>
<td>0.4169951</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>37889</td>
<td>10.00%</td>
<td>0.2999723</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>37889</td>
<td>3.60%</td>
<td>0.1862265</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>37889</td>
<td>32.15%</td>
<td>0.4670653</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>37889</td>
<td>92.26%</td>
<td>0.2672449</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>37889</td>
<td>70.64%</td>
<td>0.4554263</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>37889</td>
<td>8.26%</td>
<td>0.275295</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>37889</td>
<td>31.12%</td>
<td>0.4630007</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 28: Percent of Arts and Culture 501(c)3 Organizations Reporting Revenue Types in the 2007 IRS Core File
### Revenue Mean, Arts, 2007

<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>Obs</th>
<th>Mean (in $)</th>
<th>Std. Dev. (in $)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>31752</td>
<td>360188.50</td>
<td>3687912.00</td>
<td>2.00</td>
<td>431000000.00</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>23736</td>
<td>357369.40</td>
<td>2321390.00</td>
<td>2.00</td>
<td>177000000.00</td>
</tr>
<tr>
<td>Dues</td>
<td>14559</td>
<td>78716.96</td>
<td>2332294.00</td>
<td>4.00</td>
<td>218000000.00</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>8491</td>
<td>102231.20</td>
<td>1667354.00</td>
<td>1.00</td>
<td>847000000.00</td>
</tr>
<tr>
<td>Rental Income</td>
<td>3788</td>
<td>51005.21</td>
<td>165465.40</td>
<td>1.00</td>
<td>4590368.00</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>1363</td>
<td>272092.50</td>
<td>3487603.00</td>
<td>3.00</td>
<td>102000000.00</td>
</tr>
<tr>
<td>Special Events</td>
<td>12182</td>
<td>39111.48</td>
<td>131339.90</td>
<td>1.00</td>
<td>4683271.00</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>34956</td>
<td>528542.00</td>
<td>5258115.00</td>
<td>2.00</td>
<td>485000000.00</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>26764</td>
<td>63952.93</td>
<td>770705.70</td>
<td>1.00</td>
<td>709000000.00</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>3130</td>
<td>627639.70</td>
<td>3959739.00</td>
<td>1.00</td>
<td>138000000.00</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>11792</td>
<td>61023.42</td>
<td>775330.60</td>
<td>1.00</td>
<td>529000000.00</td>
</tr>
</tbody>
</table>

Table 29 Summary Statistics of Revenue Streams for Arts and Culture 501(c)3 Organizations in the 2007 IRS Core File

### Revenue Stream as % of Total Revenue 2007, Arts

<table>
<thead>
<tr>
<th>Revenue Stream as % of Total Revenue 2007, Arts</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>37885</td>
<td>48.54%</td>
<td>11.4491</td>
<td>-295.2</td>
<td>2169.25</td>
</tr>
<tr>
<td>Total Program Service Revenue</td>
<td>37885</td>
<td>27.31%</td>
<td>0.7929822</td>
<td>-134.8</td>
<td>29.03877</td>
</tr>
<tr>
<td>Dues</td>
<td>37885</td>
<td>2.93%</td>
<td>4.896692</td>
<td>-844.375</td>
<td>82.4881</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>37885</td>
<td>3.55%</td>
<td>2.644579</td>
<td>-7.223975</td>
<td>509.5</td>
</tr>
<tr>
<td>Rental Income</td>
<td>37885</td>
<td>0.62%</td>
<td>0.1178899</td>
<td>-8.676112</td>
<td>9.760859</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>37885</td>
<td>0.68%</td>
<td>0.440527</td>
<td>-52.0565</td>
<td>57.15385</td>
</tr>
<tr>
<td>Special Events</td>
<td>37885</td>
<td>13.45%</td>
<td>15.80272</td>
<td>-295.2</td>
<td>3013.625</td>
</tr>
<tr>
<td>Total Contributions &amp; Grants</td>
<td>37885</td>
<td>43.84%</td>
<td>11.41399</td>
<td>-2162.5</td>
<td>295.0696</td>
</tr>
<tr>
<td>Total Investment Income</td>
<td>37885</td>
<td>4.31%</td>
<td>0.2139636</td>
<td>-20.33333</td>
<td>14.53917</td>
</tr>
<tr>
<td>Sales of Securities</td>
<td>37885</td>
<td>1.14%</td>
<td>0.130287</td>
<td>-11.43887</td>
<td>8.089532</td>
</tr>
<tr>
<td>Total Other Income</td>
<td>37885</td>
<td>2.17%</td>
<td>0.1349175</td>
<td>-8.777504</td>
<td>13.24793</td>
</tr>
</tbody>
</table>

Table 30 Revenue Stream as % of Total Revenue for Arts and Culture 501(c)3 Organizations in the 2007 IRS Core File
APPENDIX B: Detailed IRS SOI Statement of Income (SOI) Income Summaries

Descriptive Statistics: All 501(c)3 Organizations in the IRS 2007 SOI File

<table>
<thead>
<tr>
<th>Percent of All Organizations Reporting this Type of Revenue, 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>15397</td>
<td>91.02%</td>
<td>0.2858437</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>15397</td>
<td>74.31%</td>
<td>0.4369203</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>15397</td>
<td>11.00%</td>
<td>0.3129266</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>15397</td>
<td>12.79%</td>
<td>0.333969</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>15397</td>
<td>26.76%</td>
<td>0.4427141</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>15397</td>
<td>44.99%</td>
<td>0.4974991</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>15397</td>
<td>19.00%</td>
<td>0.3922916</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>15397</td>
<td>82.46%</td>
<td>0.3803415</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>15397</td>
<td>3.41%</td>
<td>0.1814857</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>15397</td>
<td>76.89%</td>
<td>0.4215811</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>15397</td>
<td>22.45%</td>
<td>0.4172393</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>15397</td>
<td>37.16%</td>
<td>0.4832389</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Investment</td>
<td>15397</td>
<td>93.67%</td>
<td>0.2434363</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
<td>15397</td>
<td>69.68%</td>
<td>0.4596733</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dividends/Interest from Securities</td>
<td>15397</td>
<td>56.30%</td>
<td>0.4960272</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>15397</td>
<td>13.35%</td>
<td>0.3401604</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Income</td>
<td>15397</td>
<td>55.87%</td>
<td>0.4965531</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 31 Percent of All 501(c)3 Organizations Reporting Revenue Types in the 2007 IRS SOI File
### Table 32 Summary Statistics of Revenue Streams for All 501(c)3 Organizations in the 2007 IRS SOI File

<table>
<thead>
<tr>
<th>Revenue Mean, 2007</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>342000000.0</td>
<td>367000000.0</td>
<td></td>
</tr>
<tr>
<td>Total Earned Revenue</td>
<td>14015</td>
<td>619000000.0</td>
<td>0</td>
<td>4.00</td>
<td>29400000000</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>11442</td>
<td>707000000.0</td>
<td>0</td>
<td>17.00</td>
<td>29300000000</td>
</tr>
<tr>
<td>Dues</td>
<td>1694</td>
<td>2102632.00</td>
<td>9584361.00</td>
<td>15.00</td>
<td>1960000000</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>1962</td>
<td>1822538.00</td>
<td>15100000.00</td>
<td>8.00</td>
<td>5650000000</td>
</tr>
<tr>
<td>Rental Income</td>
<td>4120</td>
<td>523252.30</td>
<td>2462083.00</td>
<td>1.00</td>
<td>7400000000</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>6927</td>
<td>7250635.00</td>
<td>66600000.00</td>
<td>1.00</td>
<td>38700000000</td>
</tr>
<tr>
<td>Special Events</td>
<td>2925</td>
<td>239810.90</td>
<td>1673984.00</td>
<td>1.00</td>
<td>5620000000</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>12696</td>
<td>12800000.00</td>
<td>92900000.00</td>
<td>10.00</td>
<td>66900000000</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>525</td>
<td>18300000.00</td>
<td>91000000.00</td>
<td>100.00</td>
<td>15900000000</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>11838</td>
<td>7609392.00</td>
<td>36300000.00</td>
<td>146.00</td>
<td>37100000000</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>3456</td>
<td>7252151.00</td>
<td>125000000.00</td>
<td>0</td>
<td>3.681064</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>5721</td>
<td>11400000.00</td>
<td>84000000.00</td>
<td>146.00</td>
<td>37100000000</td>
</tr>
<tr>
<td>Total Investment</td>
<td>14423</td>
<td>2629425.00</td>
<td>20600000.00</td>
<td>1.00</td>
<td>15200000000</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
<td>10728</td>
<td>649492.40</td>
<td>4255434.00</td>
<td>1.00</td>
<td>2760000000</td>
</tr>
<tr>
<td>Dividends/Interest from Securities</td>
<td>8669</td>
<td>2665959.00</td>
<td>120000000.00</td>
<td>1.00</td>
<td>65000000000</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>2056</td>
<td>3948497.00</td>
<td>40500000.00</td>
<td>2.00</td>
<td>15000000000</td>
</tr>
<tr>
<td>Other Income</td>
<td>8603</td>
<td>2122079.00</td>
<td>11800000.00</td>
<td>1.00</td>
<td>3140000000</td>
</tr>
</tbody>
</table>

### Table 33 Revenue Stream as % of Total Revenue for all 501(c)3 Organizations in the 2007 IRS SOI File

<table>
<thead>
<tr>
<th>Revenue Stream as % of Total Revenue 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>14015</td>
<td>62.36%</td>
<td>0.368379</td>
<td>-1.6371</td>
<td>10.02101</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>11442</td>
<td>62.94%</td>
<td>0.4082884</td>
<td>-4.255801</td>
<td>11.88425</td>
</tr>
<tr>
<td>Dues</td>
<td>1694</td>
<td>16.58%</td>
<td>0.6604956</td>
<td>-1.696665</td>
<td>22.46324</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>1962</td>
<td>7.04%</td>
<td>0.1742477</td>
<td>-0.0039672</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>4120</td>
<td>3.41%</td>
<td>0.1331517</td>
<td>-0.4146031</td>
<td>3.681064</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>6927</td>
<td>12.95%</td>
<td>0.2147914</td>
<td>-1.6371</td>
<td>4.007133</td>
</tr>
<tr>
<td>Special Events</td>
<td>2925</td>
<td>6.59%</td>
<td>0.151058</td>
<td>-0.8064374</td>
<td>1.820125</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>12696</td>
<td>36.70%</td>
<td>0.6325161</td>
<td>-26.66735</td>
<td>30.39795</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>525</td>
<td>28.18%</td>
<td>0.2891344</td>
<td>6.10E-06</td>
<td>1.042076</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>11838</td>
<td>29.97%</td>
<td>0.6553566</td>
<td>-29.97316</td>
<td>30.39795</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>3456</td>
<td>7.63%</td>
<td>0.1713111</td>
<td>1.67E-06</td>
<td>1.851607</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>5721</td>
<td>21.64%</td>
<td>0.2972989</td>
<td>-0.3804515</td>
<td>2.334641</td>
</tr>
<tr>
<td>Total Investment</td>
<td>14423</td>
<td>10.27%</td>
<td>1.593454</td>
<td>-88.74712</td>
<td>162.9224</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
<td>10728</td>
<td>3.24%</td>
<td>0.2580222</td>
<td>-2.249609</td>
<td>24.28978</td>
</tr>
<tr>
<td>Dividends/Interest from Securities</td>
<td>8669</td>
<td>12.09%</td>
<td>2.02028</td>
<td>-88.34196</td>
<td>162.9224</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>2056</td>
<td>5.08%</td>
<td>0.4442095</td>
<td>-18.81335</td>
<td>1.360723</td>
</tr>
<tr>
<td>Other Income</td>
<td>8603</td>
<td>3.72%</td>
<td>0.2403186</td>
<td>-0.7758621</td>
<td>15.35085</td>
</tr>
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135
### Descriptive Statistics: Arts and Culture 501(c)3 Organizations in the IRS SOI File

<table>
<thead>
<tr>
<th>Percent of Arts Organizations Reporting this Type of Revenue, 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>1037</td>
<td>92.29%</td>
<td>0.2669511</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>1037</td>
<td>77.53%</td>
<td>0.4175772</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>1037</td>
<td>40.41%</td>
<td>0.490944</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>1037</td>
<td>40.98%</td>
<td>0.4920406</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rental Income</td>
<td>1037</td>
<td>32.69%</td>
<td>0.4693084</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>1037</td>
<td>44.74%</td>
<td>0.4974702</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>1037</td>
<td>32.50%</td>
<td>0.4685918</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>1037</td>
<td>91.32%</td>
<td>0.2816612</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>1037</td>
<td>0.96%</td>
<td>0.0977723</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>1037</td>
<td>92.48%</td>
<td>0.2638684</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>1037</td>
<td>11.57%</td>
<td>0.3200413</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>1037</td>
<td>56.51%</td>
<td>0.4959842</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total Investment</td>
<td>1037</td>
<td>93.35%</td>
<td>0.2493406</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
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<td>71.07%</td>
<td>0.4536544</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Dividends/Interest from Securities</td>
<td>1037</td>
<td>60.27%</td>
<td>0.4895751</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>1037</td>
<td>9.45%</td>
<td>0.2926689</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Income</td>
<td>1037</td>
<td>54.87%</td>
<td>0.4978629</td>
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Table 34 Percent of Arts and Culture 501(c)3 Organizations Reporting Revenue Types in the 2007 IRS SOI File
### Table 35: Summary Statistics of Revenue Streams for Arts and Culture 501(c)3 Organizations in the 2007 IRS SOI File

<table>
<thead>
<tr>
<th>Revenue Stream as % of Total Revenue 2007, Arts</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>957</td>
<td>28.72%</td>
<td>0.0275503</td>
<td>0.9992619</td>
<td>11500000</td>
</tr>
<tr>
<td>Program Service Revenue</td>
<td>804</td>
<td>12.46%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Dues</td>
<td>419</td>
<td>15.71%</td>
<td>0.0275503</td>
<td>0.9992619</td>
<td>11500000</td>
</tr>
<tr>
<td>Sales of Inventory</td>
<td>287</td>
<td>5.29%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Rental Income</td>
<td>339</td>
<td>4.26%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Sales of Other Assets</td>
<td>337</td>
<td>8.30%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Special Events</td>
<td>337</td>
<td>14.69%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Total Contributions and Grants</td>
<td>947</td>
<td>1.14%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Contributions to Donor Advised Funds</td>
<td>10</td>
<td>15.71%</td>
<td>0.0275503</td>
<td>0.9992619</td>
<td>11500000</td>
</tr>
<tr>
<td>Direct Public Support</td>
<td>959</td>
<td>4.26%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Indirect Public Support</td>
<td>120</td>
<td>15.81%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Government Contributions</td>
<td>586</td>
<td>4.26%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Total Investment</td>
<td>968</td>
<td>11.02%</td>
<td>0.0275503</td>
<td>0.9992619</td>
<td>11500000</td>
</tr>
<tr>
<td>Interest on Savings/Temp. Investments</td>
<td>737</td>
<td>4.26%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Dividends/Interest from Securities</td>
<td>625</td>
<td>15.81%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
<tr>
<td>Other Investment Income</td>
<td>98</td>
<td>8.30%</td>
<td>0.0000557</td>
<td>1.887868</td>
<td>72988888</td>
</tr>
</tbody>
</table>

Table 36 Revenue Stream as % of Total Revenue for Arts and Culture 501(c)3 Organizations in the 2007 IRS SOI File
APPENDIX C: Detailed Cultural Data Project Income Summaries

Descriptive Statistics: Earned Revenue in the CDP File

<table>
<thead>
<tr>
<th>Percent of Organizations Reporting this Type of Revenue, 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>2115</td>
<td>16.64%</td>
<td>0.373</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Advertising</td>
<td>2115</td>
<td>25.63%</td>
<td>0.437</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Concessions</td>
<td>2115</td>
<td>22.22%</td>
<td>0.416</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Contracted Performances</td>
<td>2115</td>
<td>34.00%</td>
<td>0.474</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Corporate Sponsors</td>
<td>2115</td>
<td>15.23%</td>
<td>0.359</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Dues</td>
<td>2115</td>
<td>35.32%</td>
<td>0.478</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gallery</td>
<td>2115</td>
<td>8.75%</td>
<td>0.283</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other Earned Income</td>
<td>2115</td>
<td>47.94%</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Parking</td>
<td>2115</td>
<td>2.36%</td>
<td>0.152</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rent</td>
<td>2115</td>
<td>33.85%</td>
<td>0.473</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Royalties</td>
<td>2115</td>
<td>0.05%</td>
<td>0.022</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Shop</td>
<td>2115</td>
<td>45.11%</td>
<td>0.498</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Special Events</td>
<td>2115</td>
<td>21.66%</td>
<td>0.412</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Subscription - Media</td>
<td>2115</td>
<td>0.10%</td>
<td>0.031</td>
<td>0</td>
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</tr>
<tr>
<td>Subscription - Performance</td>
<td>2115</td>
<td>18.44%</td>
<td>0.388</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Tickets</td>
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<td>0.499</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Touring</td>
<td>2115</td>
<td>15.04%</td>
<td>0.358</td>
<td>0</td>
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</tr>
<tr>
<td>Tuitions</td>
<td>2115</td>
<td>26.10%</td>
<td>0.439</td>
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</tr>
<tr>
<td>Workshops</td>
<td>2115</td>
<td>26.62%</td>
<td>0.442</td>
<td>0</td>
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</tr>
</tbody>
</table>

Table 37 Percent of Arts and Culture 501(c)3 Organizations Reporting Earned Revenue Types in the 2007 CDP File
### Revenue Mean, 2007

<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>352</td>
<td>448358.600</td>
<td>1556535.000</td>
<td>53</td>
<td>15400000</td>
</tr>
<tr>
<td>Advertising</td>
<td>542</td>
<td>34334.270</td>
<td>195120.200</td>
<td>3</td>
<td>3222572</td>
</tr>
<tr>
<td>Concessions</td>
<td>470</td>
<td>99276.930</td>
<td>444794.400</td>
<td>7</td>
<td>4878078</td>
</tr>
<tr>
<td>Contracted Performances</td>
<td>719</td>
<td>157363.900</td>
<td>1210276.000</td>
<td>45</td>
<td>31600000</td>
</tr>
<tr>
<td>Corporate Sponsors</td>
<td>322</td>
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<td>14</td>
<td>3641503</td>
</tr>
<tr>
<td>Dues</td>
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<td>139309.600</td>
<td>605292.000</td>
<td>10</td>
<td>8993210</td>
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<td>36076.300</td>
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<td>23</td>
<td>937685</td>
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<td>Other Earned Income</td>
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<td>205211.600</td>
<td>1071358.000</td>
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<td>15900000</td>
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<td>2874491</td>
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<td>716</td>
<td>136433.400</td>
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<td>7475684</td>
</tr>
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<td>2950.000</td>
<td>2950</td>
<td>2950</td>
</tr>
<tr>
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<td>954</td>
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<td>496308.400</td>
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<td>7697635</td>
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<td>458</td>
<td>94561.720</td>
<td>597238.900</td>
<td>20</td>
<td>11500000</td>
</tr>
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<td>731</td>
<td>28003</td>
</tr>
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<td>29400000</td>
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<td>362374.000</td>
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<td>23000000</td>
</tr>
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<td>167978.300</td>
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<td>6996101</td>
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<td>531329.000</td>
<td>3182834.000</td>
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<td>60600000</td>
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<td>563</td>
<td>49518.100</td>
<td>202298.600</td>
<td>20</td>
<td>3816821</td>
</tr>
</tbody>
</table>

Table 38 Summary Statistics of Earned Revenue Streams for Arts and Culture 501(c)3 Organizations in the 2007 CDP File

### Revenue Stream as % of Total Revenue 2007

<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>352</td>
<td>10.16%</td>
<td>0.146</td>
<td>0.000</td>
<td>0.948</td>
</tr>
<tr>
<td>Advertising</td>
<td>542</td>
<td>3.07%</td>
<td>0.059</td>
<td>0.000</td>
<td>0.722</td>
</tr>
<tr>
<td>Concessions</td>
<td>470</td>
<td>2.37%</td>
<td>0.045</td>
<td>0.000</td>
<td>0.362</td>
</tr>
<tr>
<td>Contracted Performances</td>
<td>719</td>
<td>13.65%</td>
<td>0.183</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Corporate Sponsors</td>
<td>322</td>
<td>6.50%</td>
<td>0.095</td>
<td>0.000</td>
<td>0.717</td>
</tr>
<tr>
<td>Dues</td>
<td>747</td>
<td>7.03%</td>
<td>0.099</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Gallery</td>
<td>185</td>
<td>5.39%</td>
<td>0.095</td>
<td>0.000</td>
<td>0.633</td>
</tr>
<tr>
<td>Other Earned Income</td>
<td>1014</td>
<td>10.33%</td>
<td>0.110</td>
<td>0.000</td>
<td>0.748</td>
</tr>
<tr>
<td>Parking</td>
<td>50</td>
<td>1.62%</td>
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<td>0.000</td>
<td>0.159</td>
</tr>
<tr>
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<td>716</td>
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<td>0.116</td>
<td>0.000</td>
<td>0.950</td>
</tr>
<tr>
<td>Royalties</td>
<td>1</td>
<td>0.34%</td>
<td>0.003</td>
<td>0.000</td>
<td>0.003</td>
</tr>
<tr>
<td>Shop</td>
<td>954</td>
<td>3.34%</td>
<td>0.067</td>
<td>0.000</td>
<td>0.774</td>
</tr>
<tr>
<td>Special Events</td>
<td>458</td>
<td>5.53%</td>
<td>0.088</td>
<td>0.000</td>
<td>0.891</td>
</tr>
<tr>
<td>Subscription - Media</td>
<td>2</td>
<td>0.19%</td>
<td>0.003</td>
<td>0.000</td>
<td>0.004</td>
</tr>
<tr>
<td>Subscription - Performance</td>
<td>390</td>
<td>10.33%</td>
<td>0.110</td>
<td>0.000</td>
<td>0.748</td>
</tr>
<tr>
<td>Tickets</td>
<td>1135</td>
<td>17.97%</td>
<td>0.165</td>
<td>0.000</td>
<td>0.922</td>
</tr>
<tr>
<td>Touring</td>
<td>318</td>
<td>11.31%</td>
<td>0.170</td>
<td>0.000</td>
<td>0.866</td>
</tr>
<tr>
<td>Tuitions</td>
<td>552</td>
<td>19.30%</td>
<td>0.217</td>
<td>0.000</td>
<td>0.956</td>
</tr>
<tr>
<td>Workshops</td>
<td>563</td>
<td>4.87%</td>
<td>0.102</td>
<td>0.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Table 39 Earned Revenue Stream as % of Total Revenue for Arts and Culture 501(c)3 Organizations in the 2007 CDP File
Descriptive Statistics: Contributed Income in the CDP File

<table>
<thead>
<tr>
<th>Percent of Organizations Reporting this Type of Contribution 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>2115</td>
<td>75.51%</td>
<td>0.430</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>City</td>
<td>2115</td>
<td>51.21%</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Corporate</td>
<td>2115</td>
<td>68.51%</td>
<td>0.465</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>County</td>
<td>2115</td>
<td>30.35%</td>
<td>0.460</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Federal</td>
<td>2115</td>
<td>23.97%</td>
<td>0.427</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Foundation</td>
<td>2115</td>
<td>82.17%</td>
<td>0.383</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Individual</td>
<td>2115</td>
<td>91.77%</td>
<td>0.275</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>In-Kind</td>
<td>2115</td>
<td>43.78%</td>
<td>0.496</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Parent Organization</td>
<td>2115</td>
<td>5.39%</td>
<td>0.226</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Related Organization</td>
<td>2115</td>
<td>0.19%</td>
<td>0.043</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Special Events</td>
<td>2115</td>
<td>48.32%</td>
<td>0.500</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>State</td>
<td>2115</td>
<td>62.03%</td>
<td>0.485</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>2115</td>
<td>17.26%</td>
<td>0.378</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 40: Percent of Arts and Culture 501(c)3 Organizations Reporting Contributed Income Types in the 2007 CDP File

<table>
<thead>
<tr>
<th>Contribution Mean, 2007</th>
<th>Obs</th>
<th>Mean in $</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>1597</td>
<td>258305.8</td>
<td>1977418</td>
<td>9</td>
<td>40800000</td>
</tr>
<tr>
<td>City</td>
<td>1083</td>
<td>109751.0</td>
<td>563290.2</td>
<td>150</td>
<td>12200000</td>
</tr>
<tr>
<td>Corporate</td>
<td>1449</td>
<td>129019.4</td>
<td>558380.7</td>
<td>8</td>
<td>13000000</td>
</tr>
<tr>
<td>County</td>
<td>642</td>
<td>181247.5</td>
<td>1187424</td>
<td>50</td>
<td>19000000</td>
</tr>
<tr>
<td>Federal</td>
<td>507</td>
<td>135108.7</td>
<td>489989.8</td>
<td>150</td>
<td>8380167</td>
</tr>
<tr>
<td>Foundation</td>
<td>1738</td>
<td>376797.2</td>
<td>1842585</td>
<td>100</td>
<td>33900000</td>
</tr>
<tr>
<td>Individual</td>
<td>1941</td>
<td>353683.7</td>
<td>1858658</td>
<td>5</td>
<td>27900000</td>
</tr>
<tr>
<td>In-Kind</td>
<td>926</td>
<td>450791.8</td>
<td>1076017</td>
<td>951</td>
<td>7824957</td>
</tr>
<tr>
<td>Parent Organization</td>
<td>114</td>
<td>450791.8</td>
<td>1076017</td>
<td>951</td>
<td>7824957</td>
</tr>
<tr>
<td>Related Organization</td>
<td>4</td>
<td>59284.5</td>
<td>64990.48</td>
<td>2500</td>
<td>117000</td>
</tr>
<tr>
<td>Special Events</td>
<td>1022</td>
<td>141151.3</td>
<td>652153.9</td>
<td>61</td>
<td>17300000</td>
</tr>
<tr>
<td>State</td>
<td>1312</td>
<td>128795.8</td>
<td>558752</td>
<td>93</td>
<td>7055380</td>
</tr>
<tr>
<td>Other</td>
<td>365</td>
<td>317144.1</td>
<td>1877870</td>
<td>10</td>
<td>24300000</td>
</tr>
</tbody>
</table>

Table 41: Summary Statistics of Contributed Income Streams for Arts and Culture 501(c)3 Organizations in the 2007 CDP File
<table>
<thead>
<tr>
<th>Contribution Stream as % of Total Revenue 2007</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board</td>
<td>1597</td>
<td>5.33%</td>
<td>0.081</td>
<td>0.000</td>
<td>0.625</td>
</tr>
<tr>
<td>City</td>
<td>1083</td>
<td>8.32%</td>
<td>0.117</td>
<td>0.000</td>
<td>0.958</td>
</tr>
<tr>
<td>Corporate</td>
<td>1449</td>
<td>5.31%</td>
<td>0.088</td>
<td>0.000</td>
<td>0.727</td>
</tr>
<tr>
<td>County</td>
<td>642</td>
<td>6.80%</td>
<td>0.114</td>
<td>0.000</td>
<td>0.927</td>
</tr>
<tr>
<td>Federal</td>
<td>507</td>
<td>5.24%</td>
<td>0.084</td>
<td>0.000</td>
<td>0.659</td>
</tr>
<tr>
<td>Foundation</td>
<td>1738</td>
<td>17.07%</td>
<td>0.175</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Individual</td>
<td>1941</td>
<td>11.74%</td>
<td>0.138</td>
<td>0.000</td>
<td>0.990</td>
</tr>
<tr>
<td>In-Kind</td>
<td>926</td>
<td>12.60%</td>
<td>0.166</td>
<td>0.000</td>
<td>0.945</td>
</tr>
<tr>
<td>Parent Organization</td>
<td>114</td>
<td>42.25%</td>
<td>0.279</td>
<td>0.002</td>
<td>0.997</td>
</tr>
<tr>
<td>Related Organization</td>
<td>4</td>
<td>7.11%</td>
<td>0.049</td>
<td>0.024</td>
<td>0.135</td>
</tr>
<tr>
<td>Special Events</td>
<td>1022</td>
<td>8.71%</td>
<td>0.107</td>
<td>0.000</td>
<td>0.957</td>
</tr>
<tr>
<td>State</td>
<td>1312</td>
<td>7.37%</td>
<td>0.119</td>
<td>0.000</td>
<td>0.978</td>
</tr>
<tr>
<td>Other</td>
<td>365</td>
<td>6.57%</td>
<td>0.117</td>
<td>0.000</td>
<td>0.813</td>
</tr>
</tbody>
</table>

Table 42 Contributed Income Stream as % of Total Revenue for Arts and Culture 501(c)3 Organizations in the 2007 CDP File
Descriptive Statistics: Investment in the CDP File

<table>
<thead>
<tr>
<th>Percent of Organizations Reporting this Type of Investment Income, 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>2115</td>
<td>65.01%</td>
<td>0.477</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Realized Investment</td>
<td>2115</td>
<td>17.87%</td>
<td>0.383</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Unrealized Investment</td>
<td>2115</td>
<td>18.01%</td>
<td>0.384</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 43 Percent of Arts and Culture 501(c)3 Organizations Reporting Investment Income Types in the 2007 CDP File

<table>
<thead>
<tr>
<th>Investment Income Mean, 2007</th>
<th>Obs</th>
<th>Mean in $</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>1375</td>
<td>161889.6</td>
<td>827818.6</td>
<td>1</td>
<td>16600000</td>
</tr>
<tr>
<td>Realized Investment</td>
<td>378</td>
<td>923222.2</td>
<td>3342113</td>
<td>5</td>
<td>32800000</td>
</tr>
<tr>
<td>Unrealized Investment</td>
<td>381</td>
<td>1554651</td>
<td>7657399</td>
<td>5</td>
<td>10800000</td>
</tr>
</tbody>
</table>

Table 44 Summary Statistics of Investment Income Streams for Arts and Culture 501(c)3 Organizations in the 2007 CDP File

<table>
<thead>
<tr>
<th>Revenue Stream as % of Total Revenue 2007</th>
<th>Obs</th>
<th>Mean (as %)</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>1375</td>
<td>2.41%</td>
<td>0.049</td>
<td>0.000</td>
<td>0.817</td>
</tr>
<tr>
<td>Realized Investment</td>
<td>378</td>
<td>5.70%</td>
<td>0.088</td>
<td>0.000</td>
<td>0.617</td>
</tr>
<tr>
<td>Unrealized Investment</td>
<td>381</td>
<td>8.41%</td>
<td>0.116</td>
<td>0.000</td>
<td>0.715</td>
</tr>
</tbody>
</table>

Table 45: Investment Income Stream as % of Total Revenue for Arts and Culture 501(c)3 Organizations in the 2007 CDP File
APPENDIX D: Decision Rules for Categorizing Earned Revenue Variables
<table>
<thead>
<tr>
<th>Revenue Stream</th>
<th>Key language (from CDP)</th>
<th>Org Tech</th>
<th>Target Market</th>
<th>Classification</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>admissions</td>
<td>result of visitation</td>
<td>same</td>
<td>clients as customers, exclusive</td>
<td>Embedded</td>
<td>museum exhibit</td>
</tr>
<tr>
<td>tickets</td>
<td>result of performance/presentation/exhibition</td>
<td>same</td>
<td>clients as customers, exclusive</td>
<td>Embedded</td>
<td>improv troupe show</td>
</tr>
<tr>
<td>performance subscriptions</td>
<td>tied directly to tickets sales</td>
<td>same</td>
<td>clients as customers, exclusive</td>
<td>Embedded</td>
<td>string of improv shows</td>
</tr>
<tr>
<td>membership dues</td>
<td>collection of dues/fees</td>
<td>same</td>
<td>most likely the same</td>
<td>Embedded</td>
<td>a theater company that uses membership dues from customers to subsidize client attendance and landmark preservation</td>
</tr>
<tr>
<td>workshops</td>
<td>one-time events</td>
<td>same</td>
<td>clients may be customers - unclear</td>
<td>Embedded</td>
<td>unclear - could go either way - depends on org - my assumption is to say it is mission-related</td>
</tr>
<tr>
<td>tuitions</td>
<td>ongoing series of classes/courses</td>
<td>same</td>
<td>clients as customers, exclusive</td>
<td>Embedded</td>
<td>similar to perf subscriptions</td>
</tr>
<tr>
<td>touring</td>
<td>performances away from home/usual venue</td>
<td>same</td>
<td>clients as customers, exclusive</td>
<td>Embedded</td>
<td>national touring company</td>
</tr>
<tr>
<td>contracted performance/services</td>
<td>under contract to another organization - fees for service, commissions, transaction fees, admin fees, application fees, fiscal sponsorship paid to org</td>
<td>maybe same, maybe not be</td>
<td>clients as customers, may be exclusive, may not</td>
<td>Integrated</td>
<td>improv troupe contracted to do corporate team building</td>
</tr>
</tbody>
</table>

Table 46 Decision Rules for Categorizing Earned Revenue Variables
Table 45 continued

| gallery | sales in gallery/sale of self-produced publications | same if art for sale is the same as displayed in gallery, but self-produced publications may be adjacent to core activity | clients may be customers, but not necessarily - not exclusive | Integrated | gallery selling the art on walls |
| media subscriptions | sale of subscriptions for media produced by org - magazines/newsletters/online exhibits/specialized content/webcasts/podcasts - depends on mission - could be representative of core service delivery | customers may not be clients - especially if online, and customers may not be clients - depends on imposition of exclusivity | | | a live radio show selling podcast subscriptions |
| royalties | use of intellectual property | same - property is already produced, someone is just purchasing | clients are beneficiaries, but not customers | Integrated | |
| gift shop | all merchandise sales - includes food sales of org runs own food/catering services | different | clients may or may not be customers; can walk in to gift shop without entering museum, not necessarily selling goods related to exhibits | External | |
| concession | concession commissions as a result of food sales (if run by outside vendor - different org technologies) | different | different - nonexclusive - can eat in café without going in to exhibits | External | a theater that offers parking services to all area customers, not just those attending its shows |
| parking | fees generated by lot or garage owned/leased by organization | different | clients as beneficiaries, nonexclusive | External | |
| Rent | renting out space for on-site events | n/a (except space) | nonexclusive | External | |
| advertising | sale of ad space | not necessarily tied to service activity | clients as beneficiaries, nonexclusive - do not have to consume service | External | |
| sponsorship | revenue from corporations/orgs in exchange for use of corp logo/promotions | not necessarily tied to service activity | clients as beneficiaries, nonexclusive - do not have to consume service | External | |
Table 45 continued

<table>
<thead>
<tr>
<th>special events (non-fundraising)</th>
<th>events not held for fundraising, not captured in workshops, etc.</th>
<th>unclear</th>
<th>unclear (but specifically different from all other lines)</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other earned revenue</td>
<td>open ended</td>
<td>assumed different - not captured in other variables</td>
<td>External</td>
<td></td>
</tr>
</tbody>
</table>
I estimated these regressions in various ways: using the absolute change in program level variables as the dependent variable, including the baseline 2007 revenue measures (total amounts, as well as logged), logging independent variables. When patterns of significance varied, they differed only slightly in level, and direction did not change, so I have reported results using the 2010 levels
## Program Expenses ($1000s), 2010

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>0.673***</td>
<td>0.676***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td></td>
<td></td>
<td>0.647***</td>
<td>0.651***</td>
<td>0.646***</td>
<td>0.653***</td>
<td>0.648***</td>
<td>0.654***</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td></td>
<td></td>
<td>0.749***</td>
<td>0.750***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td></td>
<td></td>
<td>0.746***</td>
<td>0.759***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.159***</td>
<td>3.083***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.001***</td>
<td>0.001***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Revenue</td>
<td>0.753***</td>
<td>0.742***</td>
<td>0.754***</td>
<td>0.743***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>1331.334***</td>
<td>1322.364***</td>
<td>1325.58***</td>
<td>1306.662***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Income</td>
<td>0.373***</td>
<td>0.381***</td>
<td>0.368***</td>
<td>0.376***</td>
<td>0.367***</td>
<td>0.377***</td>
<td>0.362***</td>
<td>0.372***</td>
</tr>
<tr>
<td>Donation Income</td>
<td>0.409***</td>
<td>0.412***</td>
<td>0.411***</td>
<td>0.414***</td>
<td>0.411***</td>
<td>0.413***</td>
<td>0.41***</td>
<td>0.412***</td>
</tr>
<tr>
<td>Investment Income</td>
<td>-0.018</td>
<td>-0.017</td>
<td>-0.024</td>
<td>-0.023</td>
<td>-0.024</td>
<td>-0.024</td>
<td>-0.024</td>
<td>-0.022</td>
</tr>
<tr>
<td>Size (FTE)</td>
<td>47.517***</td>
<td>46.265***</td>
<td>47.644***</td>
<td>46.396***</td>
<td>47.656***</td>
<td>46.362***</td>
<td>47.488***</td>
<td>46.218***</td>
</tr>
</tbody>
</table>

\[n=2097\]

Table 47 Earned Revenue and Program Expenses
<table>
<thead>
<tr>
<th>Program Expense Ratio (%) 2010</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>0.00000303**</td>
<td>0.00000287**</td>
<td>1.76E-06</td>
<td>1.58E-06</td>
<td>1.76E-06</td>
<td>1.48E-06</td>
<td>1.79E-06</td>
<td>1.51E-06</td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td>6.59E-06</td>
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<td></td>
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<td></td>
<td>6.42E-09</td>
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<td>5.79E-09</td>
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</tr>
<tr>
<td>External Revenue</td>
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<td></td>
<td>6.69E-06</td>
<td>7.01E-06</td>
<td>6.70E-06</td>
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<tr>
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<td>-0.069079**</td>
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<td>-0.0696422**</td>
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<td>-0.0701438**</td>
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<td>Government Income</td>
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<td>2.90E-06</td>
<td>3.10E-06</td>
<td>2.63E-06</td>
<td>3.10E-06</td>
<td>2.59E-06</td>
<td>3.01E-06</td>
<td>2.49E-06</td>
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<tr>
<td>Donation Income</td>
<td>1.43E-06</td>
<td>1.32E-06</td>
<td>1.53E-06</td>
<td>1.42E-06</td>
<td>1.53E-06</td>
<td>1.43E-06</td>
<td>1.51E-06</td>
<td>1.41E-06</td>
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<td>Investment Income</td>
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<td>0.00000613***</td>
<td>0.00000636***</td>
<td>0.00000641***</td>
<td>0.00000636***</td>
<td>0.00000647***</td>
<td>0.00000637***</td>
<td>0.00000647***</td>
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<td>-0.0031903**</td>
<td>-0.0032246**</td>
<td>-0.0032269**</td>
<td>-0.0032262**</td>
<td>-0.0032435**</td>
<td>-0.0032412**</td>
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<td>Size (FTE)</td>
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\( n=1224 \)

Table 48 Earned Revenue and Program Expense Ratios
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<tr>
<th>Total Attendance (1000s), 2010</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
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<tbody>
<tr>
<td>Total Earned Revenue</td>
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<tr>
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<td>-0.015</td>
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<td>-0.021</td>
<td>-0.020</td>
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</tr>
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<td>Integrated Revenue - Total</td>
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<td>0.028</td>
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<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
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<td></td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
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<td>0.000</td>
<td>0.000</td>
<td></td>
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<td></td>
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<tr>
<td>External Revenue</td>
<td>0.068</td>
<td>0.068</td>
<td>0.068</td>
<td>0.068</td>
<td>0.067</td>
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</tr>
<tr>
<td>Revenue Diversification</td>
<td>83.690</td>
<td>82.836</td>
<td>79.291</td>
<td>72.855</td>
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<tr>
<td>Government Income</td>
<td>0.035</td>
<td>0.036</td>
<td>0.029</td>
<td>0.029</td>
<td>0.029</td>
<td>0.029</td>
<td>0.029</td>
<td>0.029</td>
</tr>
<tr>
<td>Donation Income</td>
<td>0.001**</td>
<td>0.001**</td>
<td>0.003*</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
<td>0.003</td>
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<td>Investment Income</td>
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<td>-0.014</td>
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<td>-0.015</td>
<td>-0.015</td>
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</tr>
<tr>
<td>Size (FTE)</td>
<td>2.799</td>
<td>2.759</td>
<td>2.542</td>
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<td>3.156</td>
<td>3.113</td>
<td>3.164</td>
<td>3.124</td>
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$n=2115$

Table 49 Earned Revenue and Total Attendance
## Earned Revenue and Service Composition

<table>
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<tr>
<th>Total Free Attendance (1000s), 2010</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>-0.005</td>
<td>-0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Embedded Revenue</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.022</td>
<td>-0.021</td>
<td>-0.022</td>
<td>-0.022</td>
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<td></td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>0.040</td>
<td>0.040</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
<td></td>
<td></td>
<td>0.035</td>
<td>0.036</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td></td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Revenue</td>
<td></td>
<td></td>
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<td>0.039</td>
<td>0.039</td>
<td>0.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>33.713</td>
<td>33.006</td>
<td>35.481</td>
<td>28.871</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Government Income</td>
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<td>0.037</td>
<td>0.032</td>
<td>0.032</td>
<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
</tr>
<tr>
<td>Donation Income</td>
<td>0.003</td>
<td>0.003</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
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<td>0.004</td>
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<tr>
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<td>-0.019</td>
<td>-0.019</td>
<td>-0.019</td>
</tr>
<tr>
<td>Size (FTE)</td>
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<td>1.929</td>
<td>1.733</td>
<td>1.717</td>
<td>2.070</td>
<td>2.051</td>
<td>2.078</td>
<td>2.062</td>
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Table 50 Earned Revenue and Total Attending Free
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<th>Total Free Attendance (1000s), 2010</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
<th>Model 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Earned Revenue</td>
<td>-0.005</td>
<td>-0.005</td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Embedded Revenue</td>
<td>-0.020</td>
<td>-0.020</td>
<td>-0.022</td>
<td>-0.021</td>
<td>-0.022</td>
<td>-0.022</td>
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<td></td>
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<tr>
<td>Nonembedded Revenue</td>
<td>0.040</td>
<td>0.040</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Revenue - Total</td>
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<td></td>
<td>0.035</td>
<td>0.036</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Integrated Revenue - Market</td>
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<td>0.000</td>
<td>0.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
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<td>0.000</td>
<td>0.000</td>
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</tr>
<tr>
<td>External Revenue</td>
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<td>0.039</td>
<td>0.039</td>
<td>0.038</td>
<td></td>
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</tr>
<tr>
<td>Revenue Diversification</td>
<td>33.713</td>
<td>33.006</td>
<td>35.481</td>
<td>28.871</td>
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<tr>
<td>Government Income</td>
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<td>0.037</td>
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<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
<td>0.033</td>
</tr>
<tr>
<td>Donation Income</td>
<td>0.003</td>
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<td>0.004</td>
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<td>Investment Income</td>
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<td>-0.010</td>
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<td>-0.019</td>
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<tr>
<td>Size (FTE)</td>
<td>1.945</td>
<td>1.929</td>
<td>1.733</td>
<td>1.717</td>
<td>2.070</td>
<td>2.051</td>
<td>2.078</td>
<td>2.062</td>
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\(n=2116\)

Table 51 Earned Revenue and Percent Attending Free
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</tr>
<tr>
<td>Embedded Revenue</td>
<td>significant</td>
<td>significant</td>
<td>significant</td>
</tr>
<tr>
<td>Nonembedded Revenue</td>
<td>significant</td>
<td>significant</td>
<td>significant</td>
</tr>
<tr>
<td>Integrated Revenue</td>
<td>-</td>
<td>significant</td>
<td>sig when RD controlled</td>
</tr>
<tr>
<td>Integrated Revenue - Market</td>
<td>significant</td>
<td>significant</td>
<td>sig when RD controlled</td>
</tr>
<tr>
<td>Integrated Revenue - Tech</td>
<td>-</td>
<td>significant</td>
<td>sig when RD controlled</td>
</tr>
<tr>
<td>External Revenue</td>
<td>significant</td>
<td>significant</td>
<td>sig (with int-total)</td>
</tr>
<tr>
<td>Revenue Diversification</td>
<td>-</td>
<td>significant</td>
<td>-significant</td>
</tr>
<tr>
<td>Government Income</td>
<td>-</td>
<td>significant</td>
<td>significant</td>
</tr>
<tr>
<td>Donation Income</td>
<td>significant</td>
<td>significant</td>
<td>-sig (total earned rev)</td>
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</tr>
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Table 52 Comparison of Fixed Effects and OLS Results – Significant Relationships and Direction