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Nonprofit Arts Organizations: Do Funding Sources Influence Spending Patterns?

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Concern over the funding of nonprofit organizations has raised issues concerning the amount of money available for the provision of services and the potential that changes in the nature of funding will compromise organizational goals. Because of increased competition and government cutbacks, nonprofits will be forced to place more reliance on commercial ventures. This has the potential to negatively affect the behavior of recipient organizations. The question addressed in this article is 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. The analysis is focused on three categories of nonprofit arts organizations: museums, performing arts, and media and communications. Overall, the provision of program services appears to be the primary goal of organizations in these three sectors, and greater reliance on private funding does not divert funding from program service delivery.

Keywords: *nonprofit funding; nonprofit expenditures; commercialization; organizational goals*

Examples of increased commercialism abound in the nonprofit sector. In a recent survey, Massarsky and Beinhacker (2002) found that 65% of the nonprofits surveyed are currently operating an earned-income venture or express interest in doing so. Of the 42% currently operating a business venture, more than half are at the break-even point or are generating a profit. The outright conversion of nonprofit to for-profit legal status provides extreme evidence of the increased commercialism in the health care sector. Between 1981 and 1995, the market share of nonprofit HMOs fell from 88% of overall membership to 41%. Although this was the result of both new entrants and conversions, the number of hospital conversions nationwide in this period totaled 34 in

1994, 58 in 1995, and more than 100 expected in 1996 (Langley & Sharpe, 1996). The increase in commercialism is also apparent in the level of executive compensation in the nonprofit sector. Although CEO salaries are far and away higher in the private for-profit sector, they are by no means a pittance in the nonprofit sector. Abbott, Langer, and Associates (2002) found that, whereas the median income of CEOs in the nonprofit sector is \$81,000, the highest paid CEOs have incomes in excess of \$600,000.

Although the signs are there, they do not necessarily point in a negative direction. Nonprofits may subjugate their mission in pursuit of commercial ventures, or they may become more business savvy to better support their underfinanced public endeavors. Understanding the effect of increased commercialism is instrumental in deciding the ultimate fate of the preferential tax treatment given to the nonprofit sector.

In this article, we examine whether there are changes in revenue sources that may be motivating increased commercialism, the effects that a shift in funding may have on nonprofit behavior, and the empirical evidence relating to the amount and effect of commercial ventures. We develop an empirical model to test for the effect of shifting funding patterns on various categories of spending. In particular, we are interested in whether greater reliance on private funding and/or commercial ventures will ultimately cause nonprofit organizations to place less emphasis on program services and greater emphasis on fundraising and management expenses.

LITERATURE REVIEW

Funding plays an integral role in defining the scope of the nonprofit sector. Charitable organizations are designed to enhance the public good, funded in part by government, private donations, and pricing of services. There is no reason to believe that a consensus of values or a common goal is shared within or between these various groups. Rose-Ackerman (1987) considered the funding of nonprofits when the goals of the managers may be at odds with the goals of donors. In the face of government cutbacks, organizations will more actively pursue private funding with increased fundraising, and they may change their product mix to be more compatible with donors' preferences. Richard Rosett (1991) confirmed this hypothesis for art museums by presenting data indicating that museum funding patterns influence museum spending patterns and therefore the goals being pursued. Charles Parkhurst (1975) and Vera Zolberg (1986) noted the range of goals within the museum industry and emphasized collection, conservation, and program services. Within the performing arts, Henry Hansmann (1986) speculated that managers' goals may be at odds with organizational goals thereby maximizing budgets rather than attendance or quality. Indeed, Luksetich and Lange (1995) found that the major orchestras maximize budget and quality, whereas smaller market orchestras maximize output. For the nonprofit sector as a whole, Tuckman

and Chang (1992) provided evidence that organizations pursue a deliberate goal of equity accumulation, which is clearly contrary to tax laws governing nonprofit organizations. The possibility that organizational goals may be compromised as funding shifts to more commercial activities has raised concerns about the future role of the nonprofit sector and its preferential tax treatment.

Massarsky and Beinhacker's (2002) survey of nonprofits revealed that a major reason that organizations undertake commercial ventures is to generate funds to subsidize their program services. Reliance on these ventures varies greatly across the nonprofit sector with 60% of arts and culture organizations operating business ventures and 47% of health organizations, 43% of health services, 43% of public society, 42% of environmental, 33% of educational, and 26% of religious organizations are also operating ventures (Massarsky & Beinhacker, 2002). Budgetary problems may be forcing these organizations into commercial ventures to support their mission rather than purposefully choosing new funding sources and the associated preferences of donors.

One aspect of the performing arts that may lead to budgetary problems has been labeled *cost disease* by Baumol and Bowen (1965). A production process with a relatively fixed number of performers, rehearsal hours, performance length, and audience capacity characterizes the performing arts. Labor productivity is relatively constant over time. Wages driven up in other sectors of the economy because of productivity increases put pressure on wages of performers to increase thereby driving up production costs. Reluctance to increase prices causes budgetary pressures that escalate over time thus requiring greater reliance on outside funding. Brooks (2000) offered this as a possible explanation for the growing income gap experienced by the U.S. symphony orchestras of late. A review of the theory and evidence suggests that its influence is probably firm or subsector specific.

The reliance on outside funding has generated additional problems for art and culture organizations, as outlined by Anheier and Toepler (1998). An increase in funding in the 1970s and 1980s led to an expansion in the museum field. New private and institutional donors tended to support the expansion through capital investment, specific acquisitions, and special projects. The expansion of the field without the corresponding support of general operations and maintenance has forced museums into income-earning ventures. In addition, government support for the arts is wavering with significant cuts in National Endowment of the Arts appropriations in 1996.

The data analyzed by Anheier and Toepler (1998) do not reveal a significant increase in commercialism in recent years. Internal Revenue Service—Statistics of Income (IRS-SOI) data for art museums show the percent of revenue from various sources relatively constant between 1982 and 1992. As the sector has grown, the nominal dollar amounts have increased, but the relative shares have remained stable.

Public broadcasting is also suffering the effects of greater competition and government cutbacks. Total government support fell from 71.5% in 1972 to

46.8% in 1989 (LaMay & Weisbrod, 1998). The advent of cable and satellite TV, digital broadcasting, CDs, DVDs, and the Internet has increased the range of competition from the private sector. Forced into commercial ventures, the temptation to sell commercial broadcast time further blurs the distinction between the for-profit and nonprofit broadcasters. As the role of public broadcasting was never well defined, losing a unique niche in the market may cost broadcasters their nonprofit status.

Considering the nonprofit sector as a whole, revenue patterns support the contention that budgetary pressures are forcing increased commercial ventures. The number of tax-exempt organizations has increased from 1.18 million in 1982 to 1.626 million in 1998. Independent Sector¹ (2001) revenues increased from 211.9 billion to 664.8 billion over this period. The share contributed by government is approximately 30% over the period, forcing nonprofits to raise an additional \$317 billion from private sources. Although there has not been a relative increase in the reliance on commercial ventures, concerns have been expressed that changes in sources of funding could ultimately lead to changes in firm behavior.

This article focuses on the effect of funding changes on program service delivery. If commercial ventures are undertaken primarily to subsidize program services, the additional income may provide greater self-sufficiency and income diversity. In addition, Massarsky and Beinhacker (2002) reported a positive effect on the organization's reputation, mission, service and program delivery, entrepreneurial culture, and ability to attract and retain donors and staff. As such, greater reliance on private funding and commercial ventures should increase the expenditures on program services. As Gronbjerg (1993) pointed out, however, greater income diversity requires greater managerial effort and expertise. This has the negative impact of requiring greater managerial staffing and fundraising efforts at the expense of program services. Ultimately, the question is whether a nonprofit can operate a commercial venture and maintain program services true to their mission.

DATA AND REVENUE TRENDS

In this article, we focus on three categories of nonprofits in the area of arts, culture, and humanities: (a) museums, (b) performing arts, and (c) media and communications. Art, history, natural history, natural sciences, science and technology, and children's museums comprise the museum industry. Included as performing arts organizations are performing arts centers, organizations in dance, ballet, theater, music, bands, ensembles, opera, and symphony orchestras. The media and communications organizations are in film, video, television, printing, publishing, and radio.

The data used to estimate the model are from the Urban Institute's Center for Charitable Statistics. They have provided IRS's Statistics of Income FileForm 990 data for all 501(c)(3) organizations with more than \$10 million in

assets plus a random sample of approximately 4,000 smaller organizations. We have compiled a panel data set for all organizations in the three categories of nonprofits we have chosen who have filed Form 990 for each year 1987 to 1996, inclusive. The resulting sample contains 101 museums, 57 performing arts organizations, and 51 media and communications organizations.

The sample is dominated by the larger nonprofits in each sector and is not representative of the total of the nonprofits in each sector under consideration. Although excluding the emerging or declining organizations and undersampling the smaller firms, we are left with a more homogeneous, albeit larger-size, group of organizations.

This panel creation provides much more information from regression analysis than is available from an unstable, heterogeneous group of organizations representative of the nonprofit sector. These results should be considered representative of the behavior of the larger, stable organizations and not representative of the industry as a whole.²

Organizations filing IRS Form 990 are required to break down their annual expenditures into three broad categories: program services, management and general expenses, and fundraising. Funds received in a particular year but not spent in that year are recorded as an excess of revenues over costs and are added to the organization's net asset balance.

Nonprofits' revenues come from a variety of sources. As per IRS Form 990, revenues are categorized as direct public support, indirect public support, government contributions, program service revenue, membership dues and assessments, and other revenues (interest, dividends, rent, and other investments). Direct public support includes contributions from individuals, businesses, and foundations. Indirect public support includes contributions through organizations such as the United Way, combined charities, or community arts associations. Government contributions include grants from all levels of government and do not include the tax exemptions and foregone tax revenue. Membership dues are narrowly defined and exclude the value of any goods or services that may be received as a contributing member. Tables 1, 2, and 3 present the funding data for the three sectors of nonprofits to ascertain if any perceivable shifts have taken place over the period. To better highlight the sources of funding, direct public support, indirect public support, and membership dues are aggregated into one category of private contributions. Comparing funding from private contributions, government, earnings from program services, and earnings from other sources can better reveal commercial tendencies and their causes.

Consider first museum funding with average levels of real funding and the percent of total funding listed in Table 1 for the years 1987 to 1996. Included in this sample are 101 museums that filed income statements for every year of the sample. Over this period, total real funding has increased about 60%, as has all major funding sources. Private contributions, averaging just less than 40% of the total budget, have remained relatively stable over the period. The coefficient of variation, calculated as the standard deviation divided by the mean of

Table 1: Museum Funding Data: Average Funding Levels and Percent of Budget for 101 Organizations, Thousands of 1987 Dollars

	<i>Private Contributions</i>		<i>Government</i>		<i>Earned: Private Revenue</i>		<i>Earned: Other</i>		<i>Net Asset Balance</i>
1987	3,845	36.54%	874	8.30%	1,441	13.69%	4,364	41.47%	34,808
1988	5,199	44.25%	776	6.61%	1,617	13.76%	4,157	35.38%	35,689
1989	4,443	39.39%	1,254	11.12%	1,452	12.87%	4,130	36.62%	37,832
1990	4,648	42.36%	1,303	11.87%	1,445	13.16%	3,578	32.61%	37,234
1991	4,853	41.11%	1,363	11.55%	1,466	12.42%	4,124	34.93%	36,808
1992	3,354	36.01%	982	10.54%	1,449	15.56%	3,529	37.89%	31,487
1993	4,380	37.47%	1,250	10.69%	1,942	16.61%	4,118	35.23%	40,242
1994	4,869	43.24%	1,231	10.93%	1,772	15.73%	3,388	30.09%	40,191
1995	4,877	36.01%	1,365	10.08%	1,877	13.86%	5,424	40.05%	44,683
1996	5,949	37.17%	1,520	9.50%	1,895	11.84%	6,642	41.50%	52,180
Coefficient of variation		.08		.15		.11		.10	

the series, shows that the average deviation in budget percentages is approximately 8% of the mean. Earned income shows a slight increase in variability but not a significant time trend. Government funding, which provides roughly 10% of the budget, shows greater variability although no downward trend. Overall, although government funding shows relatively higher variability compared to private contributions and earned income, the period does not bear witness to a decline in this source of revenue.

There are 57 performing arts organizations that filed income statements every year from 1987 to 1996 (see Table 2). Growth in the size of the average real budget is close to 20% in this sector with all funding sources growing at roughly the same rate. There are no clear funding shifts that have occurred over this period. Compared to museums, those in performing arts are much more reliant on earnings from program services, which provide a relatively stable source of income. Private contributions are similar in weight to museums but much more stable. Earned income from other sources comprises roughly 16% of the budget compared to 36% for museums. Government support is a much smaller percent of the budget, averaging about 5.5% of the total and substantially more variable. Overall, there is greater reliance on private contributions and earnings from program services in the performing arts, which seems to provide greater stability. Government is less of a factor but is also a greater question mark. Over this period, no shifts in funding are apparent.

Funding for the 51 media and communications organizations comes primarily from private contributions and government (Table 3). Although the stability of private contributions is comparable to that of museums, the variability of government support is substantially greater. In the first 5 years of the sample, government support is about 30% of the budget; in the subsequent 5

years, that support drops to about 17%. It is unclear why this decrease occurred; an examination of the government appropriation data for the Corporation for Public Broadcasting (2002) does not show a similar decrease. Initially the drop in government support caused a corresponding drop in total funding. Eventually that loss seems to have been made up with increases in private contributions. Overall, the funding in media has been much more volatile over this period when compared to museums and performing arts.

MODEL

We assume that the objectives of nonprofits, which are described in the mission statement of each organization, can be ascertained by examining the spending patterns of nonprofit organizations. If these patterns change over time as funding sources change, the goals of the organization (or the managers of the organization) may be compromised. On the other hand, if the source of funds does not affect spending patterns, an argument can be made that those managing the organization are largely immune from outside forces. Although the financial support for program services may not be affected, we cannot go so far as to say that the type or quality of services is unaffected. Using financial data, we can study a large group of organizations but are restricted to budget allocations. Although interesting, a case study approach is required to analyze the quality of program offerings and is beyond the scope of this article.

The model we estimate consists of a system of four equations describing a nonprofit's expenditure patterns: program service, management, fundraising, and excess revenue (current revenue less current expenditure). The expenditures are influenced by organizational fixed effects, revenue sources, and asset balances. The fixed-effects term accounts for differences in geographic location, product characteristics, community characteristics, board composition, and other firm-specific factors. The time period is relatively short and allows us to assume no major shifts in these characteristics. The model is estimated using first differences with the fixed-effects term canceling out. Using first differences also recognizes the fact that the most important determinant of the level of spending in a category in any one year is how much you spent in that category the previous year. It is therefore the marginal changes that should capture the influence of revenue sources on expenditures. The system of equations to be estimated is as follows:

$$\Delta\text{Program expenditures} = \beta_{01} + \beta_{11}\Delta\text{DPS} + \beta_{21}\Delta\text{IPS} + \beta_{31}\Delta\text{GOV} + \beta_{41}\Delta\text{PSR} + \beta_{51}\Delta\text{MEM} + \beta_{61}\Delta\text{OTHER} + \beta_{71}\text{NAB} \quad (1)$$

$$\Delta\text{Management expenditures} = \beta_{02} + \beta_{12}\Delta\text{DPS} + \beta_{22}\Delta\text{IPS} + \beta_{32}\Delta\text{GOV} + \beta_{42}\Delta\text{PSR} + \beta_{52}\Delta\text{MEM} + \beta_{62}\Delta\text{OTHER} + \beta_{72}\text{NAB} \quad (2)$$

$$\Delta\text{Fundraising expenditures} = \beta_{03} + \beta_{13}\Delta\text{DPS} + \beta_{23}\Delta\text{IPS} + \beta_{33}\Delta\text{GOV} + \beta_{43}\Delta\text{PSR} + \beta_{53}\Delta\text{MEM} + \beta_{63}\Delta\text{OTHER} + \beta_{73}\text{NAB} \quad (3)$$

Table 2: Performing Arts Funding Data: Average Funding Levels and Percent of Budget for 57 Organizations, Thousands of 1987 Dollars

	<i>Private Contributions</i>		<i>Government</i>		<i>Earned: Program Revenue</i>		<i>Earned: Other</i>		<i>Net Asset Balance</i>
1987	5,058	35.89%	1,015	7.20%	6,020	42.72%	1,999	14.18%	20,453
1988	4,589	32.75%	639	4.56%	6,084	43.42%	2,700	19.27%	21,602
1989	5,020	34.44%	736	5.05%	6,152	42.21%	2,666	18.29%	21,719
1990	5,125	34.66%	1,113	7.53%	6,222	42.08%	2,328	15.74%	21,840
1991	4,631	33.68%	675	4.91%	6,153	44.76%	2,289	16.65%	22,758
1992	3,480	31.54%	359	3.25%	5,283	47.87%	1,913	17.34%	19,232
1993	4,361	33.29%	464	3.54%	6,425	49.04%	1,851	14.13%	23,955
1994	4,656	32.27%	1,439	9.97%	6,433	44.58%	1,901	13.18%	24,002
1995	5,638	35.44%	714	4.49%	6,926	43.53%	2,632	16.54%	27,130
1996	5,863	34.63%	778	4.60%	6,905	40.79%	3,382	19.98%	32,200
Coefficient of variation	.04		.38		.06		.14		

$$\Delta \text{Excess Revenue} = \beta_{04} + \beta_{14} \Delta \text{DPS} + \beta_{24} \Delta \text{IPS} + \beta_{34} \Delta \text{GOV} + \beta_{44} \Delta \text{PSR} + \beta_{54} \Delta \text{MEM} + \beta_{64} \Delta \text{OTHER} + \beta_{74} \text{NAB}, \quad (4)$$

where DPS = direct public support;
 IPS = indirect public support;
 GOV = government support;
 PSR = program service revenue;
 MEM = membership support;
 OTHER = interest, dividends, rental income, and other earned income; and
 NAB = net asset balance.

We use Zellner's seemingly unrelated regression technique (see Pindyck & Rubinfeld, 1998, pp. 358-361) to estimate the system to account for the fact that cross-equation error correlations may not be zero. We impose linear restrictions across the set of equations to represent the accounting identity that each additional dollar of revenue is either spent or goes into the excess. In addition, a restriction is imposed to account for the effect on excess revenue of current expenditures financed out of asset balances. Every \$1 of expenditures that is financed out of asset balances rather than from current revenue will reduce excess revenue by exactly \$1. The set of restrictions corresponds to:

$$\beta_{11} + \beta_{12} + \beta_{13} + \beta_{14} = 1 \quad (5)$$

$$\beta_{21} + \beta_{22} + \beta_{23} + \beta_{24} = 1 \quad (6)$$

$$\beta_{31} + \beta_{32} + \beta_{33} + \beta_{34} = 1 \quad (7)$$

$$\beta_{41} + \beta_{42} + \beta_{43} + \beta_{44} = 1 \quad (8)$$

$$\beta_{51} + \beta_{52} + \beta_{53} + \beta_{54} = 1 \quad (9)$$

Table 3: Media and Communications Funding Data: Average Funding Levels and Percent of Budget for 51 Organizations, Thousands of 1987 Dollars

	<i>Private Contributions</i>		<i>Government</i>		<i>Earned: Program Revenue</i>		<i>Earned: Other</i>		<i>Net Asset Balance</i>
1987	14,814	48.84%	9,118	30.06%	3,214	10.60%	3,188	10.51%	10,100
1988	16,058	49.85%	9,405	29.19%	2,904	9.02%	3,847	11.94%	10,990
1989	14,662	44.91%	9,464	28.99%	4,357	13.35%	4,163	12.75%	12,414
1990	15,239	46.50%	10,822	33.03%	3,858	11.77%	2,850	8.70%	13,291
1991	16,015	46.62%	11,593	33.75%	4,062	11.83%	2,680	7.80%	14,433
1992	10,535	47.88%	2,458	11.17%	3,254	14.79%	5,755	26.16%	12,587
1993	12,330	56.36%	2,008	9.18%	5,062	23.14%	2,478	11.33%	18,788
1994	16,631	49.62%	9,539	28.46%	4,882	14.56%	2,467	7.36%	19,518
1995	16,149	53.41%	6,328	20.93%	4,146	13.71%	3,615	11.96%	19,855
1996	17,598	56.15%	5,776	18.43%	4,019	12.82%	3,948	12.60%	26,189
Coefficient of variation		.08		.36		.28		.44	

$$\beta_{61} + \beta_{62} + \beta_{63} + \beta_{64} = 1 \tag{10}$$

$$\beta_{71} + \beta_{72} + \beta_{73} + \beta_{74} = 0. \tag{11}$$

Normally we would expect increases in current revenues to increase spending in all categories including the excess. We expect larger asset balances to increase spending in all categories thus resulting in a decrease in excess revenue. These assumptions will be tested in the model and are not included as restrictions. The possibility may arise that increases in funding from a particular source may redirect expenditures from one category to another. For example, if larger asset balances cause an increase in excess revenue and a reduction in current expenditures, this indicates a strong preference for budget maximization or empire building. Likewise, donors with a preference for empire building may try to redirect spending from program services to management, fundraising, or the excess revenue. Although variations in the distribution of funds across expenditures may provide some indication of the goals of the particular donors, the prospect of negative coefficients in the model provides a stronger statement as to donor preferences or demands.

Although theory provides a framework to explain the influence of funding sources on expenditures as a result of competing goals, there are also econometric problems and data reporting issues that may cause funding sources to have a significant impact on expenditure patterns. One issue is that of simultaneity—whether funding influences expenditures, whether expenditures influence funding, or both. Estimating one equation in a system results in biased estimators, although the direction of bias is uncertain. We address this problem by reestimating the above system using lagged values of the funding variables. A second issue relates to the timing of funding and expenditures. The model assumes a contemporaneous relationship, which may

cause problems in estimating the effect of funds received late in the accounting period. This issue may also be addressed by lagging the funding variables. A third issue relates to the variability of the funding source. Funding that is relatively stable may tend to finance the normal operating expenses, the result being that the more variable revenue shows a greater impact on current expenses. A fourth issue relates to the accuracy of the data itself. Nonprofit organizations have very little incentive to accurately report their expenses. This is particularly true of fundraising expenses, which are often used as a measure of efficiency and performance. The creation of the panel data set may mitigate this problem somewhat. The reporting issues tend to be more of a problem for smaller organizations that are more apt to underreport fundraising expenses. If the reporting errors are minor and randomly distributed across the sampled organizations, the coefficients will contain a minimal amount of bias.

EMPIRICAL RESULTS

Table 4 contains the estimation results of the above system of equations in a manner to best illustrate the distribution of revenue changes over the four expenditure categories. The data correspond to the years from 1987 to 1996. Only organizations that file income statements every year of the sample are included. There are 101 museums, 57 performing arts organizations, and 51 media and communications organizations in the sample. The first three rows in Table 4 show the estimated distribution of direct public support across program expenditures, management, fundraising, and excess. The first row corresponds to museums, the second to performing arts, and the third to media. The next three rows show the estimated impact of indirect public support on expenditures followed by government support, program service revenue, membership dues, and other earned income. By restriction, the coefficients in each row sum to 1. Following the current revenue flows, the next three rows in the table show the estimated distribution of net asset balances across expenditures with the restriction that spending from net asset balances reduces excess revenue. The last three rows in the table report the corresponding R^2 for each of the 12 regressions. The results in Table 4 are based on current funding and current expenditures. The model is also reestimated using current expenditures and lagged funding and the percent of budget expenditures and current funding.³ These results are discussed at the end of the section and are available from the authors upon request.

In the category of museums, most revenue increases remain unspent and flow into the excess. A \$1 increase in revenue increases the excess by a low of \$0.51 from program service revenue to a high of \$2.02 from membership dues. Although a majority of a revenue increase is not spent in the current period, the funds that ultimately increase net asset balances flow into program services at a rate of 0.006 per dollar of assets, into management at a rate of 0.0007,

and into fundraising at a rate of 0.0009. Program service revenue has the largest impact on program service expenditures with each \$1 of revenue increasing expenditures by \$0.36. Direct public support, government support, and other earned income sources all have significant positive impacts on program service expenditures. Curiously, each \$1 increase in membership dues is estimated to decrease program service expenditures by \$1.40. An increase in membership dues of \$1 is estimated to increase management expenses by \$0.56 and decrease fundraising by \$0.17. The impact of other revenue changes on management and fundraising are much less significant. For management expenses, the only other significant source of revenue with any real magnitude is program service revenue with an estimated increase of \$0.10 in expenditures for every \$1 increase in revenue. Increases in fundraising come primarily from net asset balances. Overall, this sector is characterized by the substantial amount of revenue increases that are added to asset balances and the significantly different distribution of membership dues across expenditure categories compared with the other sources of revenue.

For performing arts organizations, virtually all revenue increases in direct public support, government support, and other earned income flow into the excess increasing net asset balances. In turn, the asset balances are eventually spent on program services, to a lesser extent on management, and to a still lesser extent on fundraising. In addition to funding from asset balances, program services are funded largely from program earnings and indirect public support with income from government and other sources playing a relatively minor role. As with museums, membership dues have a negative impact on program service expenditures with an estimated decrease of \$1.02 for every additional \$1 of revenue from members. The primary source of funding for management expenditures is membership dues with an estimated increase of \$1.35 for every \$1 increase in membership revenue. Although both direct public support and other earned income have a significant positive impact on management expenditures, the impact is relatively small (approximately \$0.03 per \$1). Membership dues are also the main determinant of changes in fundraising expenditures with \$0.17 of each \$1 increase going to fundraising. Although direct public support, government support, and other earned income have a significant impact on fundraising, the size of any one factor is relatively small at less than \$0.02 for every \$1 of revenue. Considering the various revenue sources, indirect public support and program service revenue are similar in having a major impact on program service revenue. Direct public support, government support, and other earned income are similar in their effect on excess revenue. Again, membership dues have a very unique dispersion across the expenditure categories. As with the museums, a significant portion of changes in revenue in the area of performing arts affect asset balances rather than current expenditures.

The third category, media and communications, shows a much greater impact of revenue changes on expenditure patterns and shows results much different from that of the museums and performing arts. In media

organizations, changes in revenue have a significant and sizeable impact on program service expenditure. The impact of a \$1 increase in revenue ranges from a low of \$0.40 for government revenue to a high of \$0.71 for membership dues. Various revenue changes have a significant and sizeable impact on management expenses: direct public support (\$0.35), government support (\$0.46), and program service revenue (\$0.28). Only earned income from other sources affected fundraising expenses at a relatively small amount of \$0.02 per \$1. Although there is a significant amount of current revenue that flows into the excess, the amounts tend to be less than that of museums and performing arts. Both indirect public support and other earned income have a relatively large effect on excess revenue (\$0.58 and \$0.55, respectively), whereas the impact of direct public support, government support, program service revenue, and membership dues is significant but less than \$0.25 per \$1. Net asset balances have no significant effect on expenditures. The salient features of the media sector seem to be the greater dispersion of revenue across program services and management expenditures and the greater similarity in expenditure patterns across the various revenue sources.

Overall, given the variations in funding across organizations and over time, greater reliance on private support does not significantly affect the level of spending on program services. Given the minor variations in the distribution of revenue for the nonprofit museums, we would not expect major changes in spending patterns or program service delivery to occur as a result of greater reliance on private funding. The model predicts a slight increase in program service expenditure at the expense of excess revenue and asset balances. Membership dues is the one category of funding that is significantly different in the distribution of spending, but it accounts for a relatively minor share of revenue. An increase in membership may also involve a more comprehensive long-term strategy, which is not apparent in the narrowly defined category of membership dues and assessments. Members may pay small dues and be given discounted admission or seating preference with the expectation that future donations and private endowments will increase. The contemporaneous structure of the model may be causing this long-term investment strategy to generate short-term coefficient estimates significantly different from the other funding sources.

In performing arts, the major categories of revenue tend to be divided between program service expenditure and excess. Membership dues are again the exception although accounting for less than 2% of the budget. An important distinction between the major revenue sources in the performing arts sector may be more an issue of timing rather than expenditure category. The division of spending runs from approximately 80% program service expenditure and 19% excess for program service revenue to 2% program service expenditure and 95% excess for direct public support. Government support is more heavily weighted to asset balances with 17% directed to program services and 85% going into the excess. Although this is a significant difference in current expenditures, the increase that occurs in net asset balances will

Table 4.
Regression Estimates: Expenditure = f (Funding Source)

Funding Sources (Independent Variables)	Expenditures (Dependent Variable)			
	Program Service Expenditures	Management and General	Fundraising Expenditures	Excess Revenue
Direct public support				
Museums	0.2928**	0.0165**	0.0000	0.6905**
Performing arts	0.0158	0.0229**	0.0132**	0.9478**
Media	0.4314**	0.3484**	0.0039	0.2161**
Indirect public support				
Museums	0.3433	-0.1368	-0.0108	0.8043**
Performing arts	0.5827**	-0.0138	0.0066	0.4244**
Media	0.4325**	-0.0029	-0.0094	0.5798**
Government support				
Museums	0.1718**	0.0069	0.0018	0.8193**
Performing arts	0.172**	-0.0101	-0.0139**	0.8521**
Media	0.398**	0.4639**	0.0031	0.1349**
Program service revenue				
Museums	0.3657**	0.106**	0.0191**	0.509**
Performing arts	0.8036**	0.0016	0.0079	0.1866**
Media	0.487**	0.2774**	0.0112	0.2243**
Membership dues				
Museums	-1.404**	0.5653**	-0.1791**	2.0178**
Performing arts	-1.0214*	1.3515**	0.175**	0.4948
Media	0.7147**	0.1603**	0.0019	0.1229**
Other income				
Museums	0.168**	0.0061	0.0029	0.8741**
Performing arts	0.0917**	0.0325**	0.0137**	0.8619**
Media	0.4374**	-0.0047	0.0198**	0.5474**
Net asset balance (thousands of dollars)				
Museums (\$72,069) ^a	0.006**	0.0007	0.0009**	-0.0077**
Performing arts (\$44,474) ^a	0.0079**	0.0031**	0.0011**	-0.0122**
Media (\$36,171) ^a	0.0129	-0.0012	0.0012	-0.0129
R^2				
Museums ($n = 101$)	.422	.0597	.0924	.8689
Performing arts ($n = 57$)	.4909	.1311	.1484	.9125
Media ($n = 51$)	.5587	.3751	.113	.687

a. Average net asset balance in 1996.

* $p < .10$. ** $p < .05$.

ultimately increase program service expenditures. A shift from government support to private support would be expected to increase current program service expenditures and decrease the flow into asset balances.

In analyzing the influence of funding patterns and organizational goals in the media sector, program services do not appear to be significantly affected by shifting funding sources. Program services receive approximately \$0.40 from each \$1 of revenue from every source with the exception of

membership dues. Membership increases provide greater funding to program service expenditures—more than \$0.20 per \$1 over every other estimated increase. It would appear that members in this sector are demanding that a quality product be provided. The funding sources seem to affect management expenses at different rates. Management seems to gain the most from increases in government funding and, to a lesser degree, from direct public support, program service revenue, and membership increases. Although funding may not influence program service expenditures (with the exception of membership funding), it certainly has a major impact on management expenses. If funding became more reliant on private sources, the effect on program services is expected to be minimal.

To address the issues of simultaneity and the timing of revenue, the model is reestimated using lagged funding changes. Although there is a significant difference in the coefficient estimates, the results support the above findings. For museums, the dominant factor affecting current expenditures is net asset balances. The effects of lagged funding changes are relatively minor and insignificant. The one exception is the positive effect of lagged, indirect public support on management expenses. Overall, the conclusion that changes in current funding tend to increase asset balances, with little impact on current expenditures, is substantiated. For performing arts organizations, net asset balances are the major factor affecting changes in current expenditures. Although changes in funding patterns exert a minor influence on expenditures, the effect of membership dues is the one source that shows significantly different expenditure patterns. The results again support the findings based on changes in current funding. In the media sector, we find that lagged expenditures and asset balances explain very little of the variation in current expenditures. This is consistent with the above results that showed the media sector living hand to mouth with expenditures financed out of current revenue.

To explicitly determine whether increases in one type of funding tend to shift expenditure patterns, we reestimated the model using the change in the percent of budget expenditure as the dependent variable, $\Delta(E_i/\Sigma E_i)$, where E_i represents the expenditure categories. The results indicate that increases in the various funding amounts do not have a significant influence on budget allocations. This supports the above results: Shifts in funding to more commercial activities should not significantly affect program services.

DISCUSSION

There has been much discussion as to whether nonprofits' changing revenue sources will have an effect on their behavior. Indeed, one gets the impression that if nonprofits become more reliant on private funding sources—for example, donations and earned income—the pursuit of funding will undermine the delivery of services defining their mission. The evidence we have presented in this article does not support this hypothesis. Based on observed

differences in funding across organizations and over time, the amount spent on program services is not significantly affected by greater reliance on private funding.

In the area of museums, over the period from 1987 to 1996, there has not been a trend of decreased government support and greater reliance on private funding. The evidence suggests that, if such a shift were to occur, it would not likely influence spending patterns significantly. Most income increases received by museums in any one year are not spent in that year. These funds end up in the museum's net asset balance and, therefore, appear to become discretionary funds, that is, not earmarked for any particular purpose. In subsequent years, funds from the asset account are spent to support program services and, to a much lesser extent, management and fundraising activities. Whether the funds come from government or private sources seems to have little impact on management expenses or fundraising activities.

We find the same general tendencies in the performing arts organizations. The level of government support is more variable, but it does not show a downward trend. As in the museum sector, increases in funding tend to affect program services and excess with very little impact on management expenses and fundraising. The net asset balances eventually affect program services and, to a lesser extent, management and fundraising. Whether the funds come from the private sector or the public sector has little effect on management and fundraising, but more effect on the timing of program services increases.

Revenues received in the media and communications industry tend to be spent in the year they are received with a substantial proportion of total revenue flowing into current programming activities. The support commonly ranges from \$0.40 to \$0.50 per \$1 of revenue. The exception is membership dues, which increases program service expenditures by \$0.71 per \$1 of additional revenue. The remainder of the revenue is divided between management and excess with very little effect on fundraising. The range of management support varies greatly. A substantial part of government increases goes to management (\$0.46), followed by direct public support (\$0.35), program service revenue (\$0.28), and membership dues (\$0.16). Indirect public support and other income have no significant impact on management expenses.

The media and communications organizations in the study did experience a significant drop in government support in 1992. Although private funding did not immediately respond to the government cutback, the budget did recover primarily through increases in direct public support, program service revenue, and other earned income. Although some minor variations in program service expenditures may be expected, we would expect a significant decrease in management expenses. Greater reliance on private funding is expected to increase net asset balances, but how or when these balances are used is uncertain. Perhaps the uncertainty of funding has motivated a more cautious approach to budgeting. In any case, the effect on program service expenditures of a shift from public to private funding is minimal.

The expenditure patterns of the institutions in the museum and performing arts sectors examined in this article do not appear to be strongly affected by sources of funding. They also appear to have the provision of program services as their primary goal. As with Tuckman and Chang (1992), we do see increases in funding affecting asset balances. The model indicates that these balances are eventually used in support of program services, consistent with the existing tax laws governing nonprofit organizations. In the media and communications sector, revenue sources do affect current expenditure patterns, particularly for program services and management. Although there is some variation in the dispersion across program service expenditures, the funding source seems to have a greater impact on the financing of management expenses. Once again, the evidence indicates that the provision of programming appears as the primary goal in these organizations, and greater reliance on private funding does not decrease spending in this area.

The results of this study are based on the behavior of the larger, established organizations including museums, performing arts, and media and communications. The results should not be generalized to include the less established, smaller organizations in these fields and the other sectors of nonprofit organizations. The ability of newer, smaller organizations to replace government funds is weaker, in which case funding issues will have a much greater impact on budgets and expenditures. The volatility and variability among the smaller, emerging nonprofits makes it extremely difficult to isolate the impact of changes in government support on the success of such organizations. The uniqueness and turnover of the entire nonprofit sector make it impossible to generalize how changes in funding will affect each individual organization.

In addition, the study is comparing the finances of the larger, established organizations over a relatively short time period. In this context, funding issues have little impact on expenditure patterns. Those organizations that are more reliant on private funding or have become more reliant over the period are not altering their expenditure patterns significantly. This is not to say that a significant decrease in government support for the entire sector will have no impact on the nonprofit organizations. The necessity of the entire sector to replace lost revenue will affect program delivery and nonprofit behavior. Programming and workshops may become more commercialized by focusing on blockbuster exhibits, popular venues, and less cultural or artistic performances and exhibits. In addition, prices may increase to replace lost revenue by restricting access to the younger and low-income population.

The results of this article provide a small step in understanding the importance of funding sources on nonprofit behavior. From a financial standpoint, it appears possible to operate commercial ventures to support program services. This supports the findings of Massarsky and Beinhacker (2002). What this article cannot address is the potential and often observed commercialization of the program services themselves. A case study approach focused on the types of programming is necessary to reveal behavioral effects that are beyond the scope of financial balance sheets.

Notes

1. This term includes organizations designated as 501(c)(3), 501(c)(4), and religious congregations.
2. Segal and Weisbrod (1998) created a similar data set and described the benefits and limitations of doing so.
3. We would like to thank an anonymous referee for suggesting the use of budget expenditure percentages as the dependent variable.

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