Charitable Organizations' Strategies and Program-Spending Ratios

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SYNOPSIS: Analysis in this study demonstrates how differences in strategy can be incorporated into evaluations and comparisons of financial statements of charitable organizations. The ratio of program spending to total spending, a metric commonly used in practice to evaluate charities, is the focus of the analysis. Our approach involves classifying charities according to how they access markets for donated resources and then using regression analysis to predict an organization's program-spending ratio, given the organization's strategic choice, size, and charitable objective. We then compare the predicted ratio to the organization's actual ratio to identify candidates for further review and investigation. In doing so, this paper illustrates how considering strategic choice enhances the analysis of financial statements of charitable organizations and informs assessments of organization effectiveness.

INTRODUCTION

The notion that industry effects and strategic differences among firms need to be considered when evaluating and comparing the financial performance of commercial enterprises is fundamental to contemporary financial statement analysis (Palepu et al. 1996; Stickney and Brown 1999). This study investigates how such factors can be considered when evaluating and comparing the financial profiles of not-for-profit charitable organizations. The focus of the analysis is on the program-spending ratio, defined as the fraction of total expenses committed to activities that advance the charitable objective. We focus on this particular measure because it is used frequently as a basis

for making contribution decisions (Weisbrod and Dominguez 1986; Harvey and McCrohan 1988; Posnett and Sandler 1989; Callen 1994; Tinkelman 1996).

Our approach presumes that, just as competing for-profit organizations pursue divergent strategies in product and service markets, not-for-profit charities position themselves differently in the market for charitable resources. In particular, acting both in their private interest and in the collective interest of all parties affected by the charitable enterprise, some organizations commit relatively little to fund-raising activities while other organizations undertake costly fund-raising activities (Steinberg 1986). Similar to interpretations of financial ratios computed for proprietary enterprises, informed interpretations of program-spending ratios as indicators of organization effectiveness involve considering differences in strategic positioning.

To illustrate the relevance of strategy for financial statement analysis, we use publicly available data from filings with the Internal Revenue Service during the period 1992–1998. Our approach consists of four steps:

1. assessing the organization's strategic position;
2. using regression analysis to estimate expected program-spending ratios as a function of strategic position, organization size, and charitable objective;
3. identifying charities worthy of further investigation based on comparisons of expected and actual program-spending ratios;
4. using financial disclosures provided by the organization to assess the extent to which the unexplained program-spending ratio is attributable to organization effectiveness vs. other factors.

We emphasize that the objective is to encourage more informed financial analyses of charitable organizations by regulators, oversight agencies, and potential contributors. We cannot feasibly consider all potentially relevant factors for evaluating financial profiles of charities, and therefore, we make no claim that our specific approach is optimal or comprehensive. Even so, we demonstrate how considering even a small set of factors can provoke more focused investigations that move the evaluator toward definitive conclusions about organization effectiveness.

THE MARKET FOR PHILANTHROPIC CAPITAL

We characterize charities as organizations that broker contributed resources from donors to *program activities* that advance the organization's philanthropic mission. We assume that the organization's objective is to maximize the amount committed to program activities. The organization pursues this objective either by increasing the resources available for distribution or by reducing the costs of brokering, obtaining resources, and administering the organization. The amount distributed to program activities can be construed as the amount of resources contributed to the organization less *fund-raising expenditure*—the amount spent on soliciting, processing, and distributing contributed resources.[1] How revenue, and ultimately program spending, depend on fund-raising expenditure is central to the analysis, and thus, we clarify the nature of these dependencies.

We begin by assuming that incremental amounts committed to fund-raising yield incremental revenue. Fund-raising efforts inform potential donors about the nature and virtue of the organization's philanthropic mission, and inspire donors to contribute. Similar to the role of advertising in product markets (Stigler 1961), fund-raising reduces

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[1] In practice, fund-raising expenses and administrative expenses are reported separately. Combining these categories facilitates, without compromising the point of, the presentation.

search costs to potential donors (Rose-Ackerman 1982; Weisbrod and Dominguez 1986). We assume diminishing returns to fund-raising such that the marginal donation from fund-raising decreases as the amount spent on fund-raising increases. We also assume that all contributed resources are ultimately either committed to program activities or consumed in the fund-raising process such that total expense = revenue = program spending + fund-raising expenditure.

Given this characterization, the problem is trivial for the case of a single organization appealing to identical prospective donors. The organization maximizes program spending by fund-raising to the point where the marginal revenue equals the marginal cost of fund-raising. In practice, however, some organizations spend relatively little on fund-raising, while others commit substantial amounts to fund-raising activities. Explaining such differences in fund-raising costs requires that we enrich the characterization beyond the single donor, single organization scenario.

To this end, consider that relatively high fund-raising can affect contributions adversely. The reason is that at least some potential contributors interpret fund-raising expenditures as nonproductive costs of brokering contributed resources from donors to program activities, and therefore, they prefer organizations that spend relatively little on fund-raising (e.g., Barrett 1999). A justification for why donors condition contribution decisions on relative fund-raising costs is that the social value of philanthropy is maximized by allocating donated resources to organizations where the residual of incremental contributions less the *marginal* fund-raising costs is the greatest. In practice, evaluations are predicated on *average* fund-raising expenditures, because marginal fund-raising costs typically cannot be observed (Council of Better Business Bureaus-Philanthropic Advisory Services 1982; Rose-Ackerman 1982; Steinberg 1986; National Charities Information Bureau 1996a).

Now consider a market for donations composed of two charities and two donor clienteles where all market participants share a common desire to maximize the amount of contributed resources directed to a specific philanthropic objective. Donors in the first clientele are willing and able to make large contributions that advance substantially the collective progress toward the objective. Such donors maximize the effect of their contributions by seeking out and contributing to organizations that charge the least to broker transactions. Organizations respond to donors in this clientele by minimizing costs of fund-raising/brokering activities. That is, rather than committing resources that are required to identify and persuade potential contributors, these organizations do little more than bear the costs of disclosing financial information to potential donors who request such information.

In contrast, donors in the second clientele, who also care about the philanthropic objective, lack the resources to make large contributions. Thus, their ability to advance the philanthropic objective is negligible when they act individually. Because they alone cannot materially influence collective progress toward the objective, these donors lack incentives to seek out organizations that share their objectives and become informed about the organizations' relative costs of brokering contributions. Donors in this category are said to be "rationally ignorant" when making contribution decisions (Downs 1957; Tinkelman 1999), and they contribute only when they are properly motivated and informed (Becker 1974; Andreoni 1989). Because contributions from such donors can be substantial in the aggregate even when they are inconsequential individually, charities have incentives to bear the costs of identifying and engaging these potential contributors.

Doing so increases the costs of fund-raising and potentially undermines the organization's position with respect to donors who comprise the first clientele, however.[2]

To simplify the presentation without compromising the point of the analysis, we assume that two charitable organizations enter this two-clientele donor market sequentially and that participating organizations have identical fund-raising and administration (production) functions. The first entrant computes the optimal fund-raising expenditure for each donor clientele and the corresponding residual that is available for program spending. If either (or both) of these residuals is positive, then the organization aligns with the donor clientele that yields the greater return. The second entrant's problem is straightforward given the first entrant's decision—the second entrant engages the donor clientele not engaged by the first entrant, assuming that the clientele promises revenue in excess of fund-raising costs.

Thus, under reasonable circumstances where both clienteles indicate revenue in excess of fund-raising, our contrived market consists of two organizations, each uniquely aligned with one of the donor clienteles. The arrangement is socially efficient in that the total of the resources directed toward the philanthropic objective is weakly greater than when organizations compete directly for contributions. The organization that pursues potential donors who have incentives to become informed spends less on fund-raising than the organization that pursues donors who lack such incentives, and therefore, financial profiles of the organizations differ. Despite these differences it is entirely possible that both organizations operate efficiently, that fund-raising (brokering) occurs in socially efficient amounts, and that both organizations advance the collective interests of all market participants. Differences in program-spending ratios indicate differences in how the organizations position themselves strategically, not in how efficiently or effectively the organizations pursue the charitable objective. *Thus, measures predicated on the average amounts allocated to fund-raising vs. program activities are not sufficient to infer inefficiency or malfeasance by charities.*

THE FRAMEWORK
Assessing Strategic Position

Strategic positioning of charities with respect to donor clienteles affects organizations' financial profiles in predictable ways. To illustrate the implications for financial statement analysis, we focus on the program-spending ratio, designated PGMEX and computed as program expense divided by total expense. Our focus on this measure is justified by the frequent use of this or a similar measure to evaluate the worthiness of charities. An organization with an acceptably high PGMEX is typically evaluated more

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[2] A recent survey of contributors to charities supports the two-clientele characterization where wealthy contributors are more likely to consider the costs of brokering contributions (Stehle 1998). In particular, under half of 1,000 potential contributors from the general population indicate that the portion of contributions spent on program activities influences their giving decisions. In contrast, 256 of 400 (64 percent) wealthy Americans, defined as individuals with annual incomes in excess of $200,000, consider amounts spent on program services. In addition, 38 percent of all Americans, but 56 percent of wealthy Americans, indicate that they pay "a lot" of attention to the effectiveness of the charities that they support.

favorably than an organization that shows a ratio less than the acceptable standard (e.g., Schuman 1993; Barrett 1999).[3]

Notice that PGMEX varies inversely with the extent that contributed resources are consumed by administrative and fund-raising activities. Thus, evaluations of the organization are more favorable as PGMEX increases, *holding strategy constant*. Accordingly, an informed interpretation of PGMEX requires understanding the organization's strategic position. In the remainder of the paper, we use publicly available information that all charities are required to disclose to the Internal Revenue Service to illustrate an informed analysis of program-spending ratios.

Identifying a charity's strategic position is straightforward when the charity provides a profile of its targeted donors. Because such information is not consistently reported, we use financial information about two fund-raising activities to infer strategic positioning.

First, the relatively high costs of direct mail and telephone solicitations are well documented (AICPA 1987, 1998; Roberts 2000). Both the Internal Revenue Service and Generally Accepted Accounting Principles (GAAP) require that such costs, called *joint costs*, be disclosed separately. We presume that disclosure of joint costs indicates that the organization is engaged in costly mail and/or telephone solicitations focused on relatively small potential donors. Specifically, we compute JCEX as joint costs deflated by total expense.

Second, we consider the use of professional fund-raisers. As with direct solicitation, the relatively high cost of engaging professional fund-raisers is well known (Greenlee and Gordon 1998; Tuckman and Chang 1998). We use disclosures required by the Internal Revenue Service to compute PROFEX, the amount paid to professional fund-raisers deflated by total expense.

We use the measures JCEX and PROFEX to distinguish strategic positioning. If the organization commits resources to direct mail solicitation (if JCEX > 0) or to professional fund-raising (if PROFEX > 0) or to both activities in at least one year during the sample period, then we presume an appeal to small, relatively uninformed, donors. We designate such organizations *revenue-maximizers*. On the other hand, if the organization does not disclose joint costs or professional fund-raising costs, then we presume a strategy designed to appeal to large informed donors. We designate these organizations *cost-minimizers* in the analysis that follows. In other words, our presumption is that revenue-maximizers identify and solicit small rationally ignorant donors, whereas cost-minimizers appeal to large well-informed donors.

Analyzing Program-Spending Ratios

Once an organization's strategic positioning is assessed, the next step is to estimate a reasonable value for PGMEX. We use the following regression model to illustrate this process.

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[3] To illustrate, certification by the National Charities Information Bureau (NCIB 1996a) requires that at least 60 percent of annual expenditures be allocated to program activities; the Philanthropic Advisory Services of the Council of Better Business Bureau (1982) specifies that at least 50 percent of public contributions and 50 percent of total revenue be spent on program activities. The U.S. Office of Personnel Management (OPM), which reviews and approves organizations that can participate in the Combined Federal Campaign salary reduction program for U.S. government employees, uses a 75 percent of total support and revenue standard (OPM 1998).

$$PGMEX = \beta_0 + \beta_1 \, LNREV + \gamma_j \, TYPE_j + \varepsilon,$$

where:

PGMEX	=	program expense divided by total expense;[4]
LNREV	=	natural logarithm of total revenue;
$TYPE_j$	=	eleven dummy variables, which classify observations into twelve mutually exclusive classifications, and which equal 1, when the charitable objective is j = 1,...,11, and equal 0, otherwise;
β_i, i = 0, 1	=	regression coefficients that indicate overall mean effects (β_0) and the relation between PGMEX and LNREV (β_1);
γ_j, j = 1,...,11	=	regression coefficients which indicate mean differences in PGMEX that can be attributed to the charitable objective; and
ε	=	a regression error.

The regression model is estimated first for a sample comprised of revenue-maximizers and then for a sample of cost-minimizers to accommodate differences between the two strategies.

Organization size is included in the model as it can influence fund-raising/administration costs. We anticipate economies of scale with respect to fund-raising/administration activities. Moreover, we expect a reputation effect in the market for charitable contributions such that marginal fund-raising costs are less for well-known, typically older and larger, organizations. Following Feigenbaum (1987) and Tinkelman (1999), we use the natural log of total revenue, designated LNREV, to consider the influence of these and other factors correlated with size. We anticipate a positive association between LNREV and PGMEX.

We also expect that costs of fund-raising and administration vary according to the charitable objective. For example, the relative costs of administering geographically diverse social programs are likely to be greater than the costs of administering medical research where activities are concentrated geographically. In addition, evidence in prior studies suggests that the willingness of potential contributors to donate time and money, and therefore the relative costs of fund-raising and administration, depends in part on the charitable objective (Weisbrod and Dominguez 1986; Posnett and Sandler 1989). To consider the potential consequences of such differences, we include 11 intercept dummy variables in the regression model to partition the organizations into 12 categories. The taxonomy described in Hodgkinson et al. (1993, Appendix A) is used to classify the sample organizations into 12 charitable objectives.[5] Specifically, we set $TYPE_j = 1$ to distinguish organizations with common objective j; otherwise, $TYPE_j = 0$. These dummy variables consider the mean effects of differences in PGMEX that are attributable to the charitable objective.[6]

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[4] Notice that PGMEX is bound between 0 and 1 by construction. This restriction on the dependent variable violates the ordinary least squares (OLS) assumption that errors are distributed normally. OLS estimates under these circumstances are unbiased, although tests of statistical significance can be affected in unspecified ways (Maddala 177, 94).

[5] The 12 classifications are educational (13 revenue-maximizers + 6 cost-minimizers = 19 total organizations), environmental (7 + 18 = 25), animal related (5 + 13 = 18), general health facilities (10 + 17 = 27), disease and disorders (9 + 37 = 46), medical research (5 + 11 = 16), crime or legal related (6 + 10 = 16), youth development (8 + 5 = 13), human services (23 + 22 = 45), international and foreign affairs (20 + 15 = 35), civil rights and social action (7 + 11 = 18), and public benefit (5 + 9 = 14), for a total of 292 organizations.

[6] Considering factors beyond LNREV and TYPE does not alter the implications of the analysis. In particular, the age of the organization (Weisbrod and Dominguez 1986), unrelated commercial activities (Hines 1998), reliance on government subsidy and/or direct contributions, and the existence of profit-making affiliates are not statistically significant (incrementally) in multivariate regressions. Excluding these measures from the analysis facilitates a parsimonious presentation of the approach.

We can compute a predicted PGMEX by applying the estimated coefficients to the variable measures for each organization. Thus, values for PGMEX predicted by the regression model are program-spending ratios adjusted for effects of strategic position, organization size, and charitable objective. Accordingly, differences between actual and predicted program-spending ratios—the regression residuals—indicate unexpected portions of program-spending ratios not attributable to the variables in the regression. It is important to note, however, that the regression residuals are a means to an end and not an end in itself. That is, residuals provide a basis for identifying organizations for further investigation. For example, a large positive (negative) difference can indicate that the organization is particularly efficient (inefficient). Alternatively, a large difference can indicate a peculiar accounting treatment or feature of the organization that distorts financial information relative to other organizations. Consequently, assessments of efficiency or effectiveness based solely on the magnitude and/or direction of the residual are inappropriate. Further investigation of large differences is essential to identify reasons why reported PGMEX differs from predicted PGMEX.

The remainder of the paper illustrates how the foregoing approach applies. Data for 292 organizations for the period 1992–1998 are used in the illustration.

AN ILLUSTRATION

Sample Selection

We obtain Form 990 filings with the U. S. Internal Revenue Service primarily by mail requests, although some are obtained by visiting organization headquarters. We made requests of 458 charities evaluated during 1996 and 1997 by the National Charities Information Bureau (NCIB) and/or the Philanthropic Advisory Services of the Better Business Bureau (CBBB-PAS).[7] At least one filing from 348 organizations (a 76 percent response rate) is obtained. In most cases, however, we have filings for three or four years, but the number of observations per organization varies from one to seven, encompassing 1992–1998. Overall, our sample consists of 1,239 organization-year observations.

As noted previously, the regression model includes indicator variables, designated TYPE, that classify the observations by the charitable objective. To enhance statistical power, organizations from classifications comprised of less than 45 organization-year observations are omitted. Ratio variables are computed by summing measures for all years that the organization is represented in the sample to obtain a single PGMEX, JCEX, and PROFEX measure for each organization. To illustrate, for an organization with data for 1993 to 1995, PGMEX is computed as the sum of program expense for the years 1993, 1994, and 1995, divided by the sum of total expense for the three years. LNREV is the natural log of the mean revenue computed for each year the organization is represented.

Assessing Strategic Position

As discussed previously, we classify organizations with positive direct mail solicitation and/or professional fund-raising expenditures in any year as revenue-maximizers, while all other organizations are classified as cost-minimizers. Based on this classification, 174 of the 292 organizations (60 percent) are revenue-maximizers and 118 (40 percent) are cost-minimizers.

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[7]　Federal law requires that tax-exempt organizations provide copies of Form 990 for three years (Luecke et al. 1999). Other well-known data sources about charitable organizations (e.g., Gordon et al. 1999) do not include data about joint costs or professional fund-raising that are essential to our analysis.

Financial profiles for the sample organizations are displayed in Table 1. The first entry is for the full sample of 292 organizations, the second entry is for the 174 revenue-maximizers, and the third entry is for the 118 cost-minimizers. Mean program-spending ratio PGMEX is 0.762, well above the benchmark used by most oversight agencies.

Less than half (42.0 percent) of the organizations use professional fund-raisers for at least one year, and the mean ratio of professional fund-raising costs to total expenses exceeds the third quartile of the distribution (not reported in the table). This suggests that fund-raising costs can be substantial for the minority of the organizations that engage professional fund-raisers. Implications for the ratio of joint costs of direct solicitation to total expense are similar. That is, less than half (43.1 percent) of the organizations report such costs for at least one year, but the mean ratio of 0.102 suggests that amounts are substantial for those that do. Organizations designated as revenue-maximizers are slightly larger than organizations designated as cost-minimizers, but the difference is not statistically significant ($p > 0.25$).

Predicting Program-Spending Ratios

The next step involves using the regression model to predict PGMEX, given the organization's strategy, size, and charitable objective. To this end, we estimate the regression specification for the sample of 174 revenue-maximizers and the sample of 118 cost-minimizers. Adjusted R^2s are 0.090 and 0.113, respectively. Consistent with expectations, we find that size (LNREV) explains variation in PGMEX. Specifically, statistically significant estimates on LNREV are 0.022 ($t = 2.810$) and 0.021 ($t = 2.753$) for revenue-maximizers and cost-minimizers, respectively. In contrast, the classification by charitable objective (TYPE) is jointly statistically significant for revenue-maximizers ($F = 4.892$; $p = 0.028$), but not for cost-minimizers ($F = 0.913$; $p = 0.341$). Overall differences in the structure of the regression specification between revenue-maximizers and cost-minimizers are statistically significant ($F = 2.735$, $p < 0.002$). This result indicates that strategic positioning explains variation in PGMEX beyond that which is explained by organization size and charitable objective.[8]

Analysis of Six Environmental Organizations

To illustrate how the approach can be used to identify candidates for further investigation, we profile six environmental organizations in Table 2. The organizations are ordered according to PGMEX; the Greenpeace Fund has the highest ratio (0.905) and Inform the lowest (0.767). Three of the six organizations employ professional fund-raisers, a proportion in line with the population of 292 organizations (42 percent in Table 1). Only one of the six, Greenpeace, reports joint costs of direct solicitation, which is low relative to the 43.1 percent of the 292 charities that pursue this tactic. Finally, there is considerable diversity in terms of organization size. For example, mean annual revenue for the smallest (Inform) is less than 3 percent of mean annual revenue for the largest (the National Audubon Society).

Notice that the Greenpeace Fund, the National Audubon Society, and the Sierra Club use direct mail solicitation or professional fund-raisers. Accordingly, these three

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[8] An alternative approach is to estimate, for the entire sample of 292 organizations, a single regression that includes JCEX and PROFEX, along with LNREV and TYPE, as explanatory variables. This approach indicates relations and interpretations consistent with those advanced for the two-sample primary analysis. In particular, R^2 for this specification is 0.243, and measures are statistically significant with the expected sign.

TABLE 1
Descriptive Statistics for 292 Sample Organizations and for Organizations Classified According to Strategic Profile

	Program to Total Expense (PGMEX)	Professional Fund-Raising to Total Expense (PROFEX)	Joint Costs of Direct Solicitation to Total Expense (JCEX)	Mean Annual Total Revenue ($ millions)
Mean				
Full sample	0.762	0.009	0.102	32.394
Revenue-maximizers	0.733	0.016	0.172	33.181
Cost-minimizers	0.810	0.000	0.000	31.233
Median				
Full sample	0.780	0.000	0.000	7.759
Revenue-maximizers	0.756	0.003	0.081	8.932
Cost-minimizers	0.832	0.000	0.000	6.787
Standard deviation				
Full sample	0.144	0.032	0.191	118.460
Revenue-maximizers	0.145	0.041	0.222	136.760
Cost-minimizers	0.130	0.000	0.000	85.125

In the first three rows, the first entry is for the sample of 292 organizations, the second entry is for 174 "revenue-maximizers," the third entry is for 118 cost-minimizers. PGMEX is computed as program expense (form 990, part II, line 44B) divided by total expense (line 44A); JCEX is joint costs from educational campaigns and fund-raising solicitations (part II) divided by total expense; PROFEX is professional fund-raising fees (part II, line 30A) divided by total expense; mean annual total revenue is the mean total revenue (part 1, line 12) for the years when the organization is represented in the sample. The numbers of organizations that, for at least one fiscal year, use professional fund-raisers are 122 (42.0%), report joint costs of direct solicitation are 126 (43.1%), and either use professional fund-raisers or report joint costs 174 (60.0%). Entries are from distributions of 292 organization means computed using annual observations for the number of fiscal years that the organization is represented in the sample.

TABLE 2
Descriptive Statistics for Selected Environmental Organizations

Organization	Years Data Available	Program to Total Expense (PGMEX)	Professional Fund-Raising to Total Expense (PROFEX)	Joint Costs of Direct Solicitation to Total Expense (JCEX)	Total Annual Revenue ($ millions)
Greenpeace Fund	1994–97	0.905	0.017	0.153	8.510
Save the Redwoods	1994–97	0.902	0.000	0.000	17.903
Conservation International	1992–96	0.846	0.000	0.000	14.718
Sierra Club	1994–97	0.840	0.022	0.000	44.753
National Audubon Society	1992–96	0.798	0.017	0.000	53.651
Inform	1994–96	0.767	0.000	0.000	1.504

Entries are means of annual observations for the fiscal years indicated in the second column of the table. All measures except total annual revenue are ratios.

organizations are classified as revenue-maximizers. In contrast, Save the Redwoods, Conservation International, and Inform do not use these relatively expensive fund-raising techniques, and are classified as cost-minimizers.

Table 3 compares reported and predicted PGMEX for each organization with the difference displayed in Column (E). This difference is the fraction of total expense directed toward program activities that is not explained by the fund-raising strategy, organization size, and charitable objective. A positive (negative) difference indicates that the organization is spending relatively more (less) on program activities given the profile of the organization that is revealed in the financial statements.[9]

We use the Greenpeace Fund to illustrate how these data provide a basis for a preliminary evaluation of specific organizations. Greenpeace has actual PGMEX of 90.5 percent, much higher than the 78.7 percent predicted by the regression model. One explanation for the unusually high PGMEX is that Greenpeace is particularly efficient. Alternatively, the high PGMEX may be attributable to a peculiar accounting treatment or another feature of the organization. Accordingly, conclusions about the organization are premature until the difference is investigated.

To this end, we obtain the 1997 annual report for the Greenpeace Fund and reports issued by two privately funded oversight agencies—the April 1996 report from the NCIB (1996b) and the June 1997 report of the CBBB-PAS (1997). Review of these materials reveals that Greenpeace USA consists of two legal entities, both headquartered in Washington D.C. The first entity, the Greenpeace Fund, as evaluated in Table 3, qualifies under the Internal Revenue Code as a 501(c)(3) charitable organization. The second entity, Greenpeace Inc., not evaluated in the table, is a 501(c)(4) organization that engages in lobbying activities. This distinction is significant as contributions to 501(c)(3) organizations, but not to 501(c)(4) organizations, are tax deductible to the contributor.[10] We also learn that Greenpeace USA is affiliated with Greenpeace International, located in Amsterdam, the Netherlands.

Selected information about Greenpeace Fund, Inc and Greenpeace, Inc. for fiscal 1997 is displayed as Table 4. Notice that the 1997 program-spending ratio for Greenpeace Fund is 94.4 percent, higher than the mean ratio reported in Table 3, but the ratio for Greenpeace Inc. is 76.6 percent. Moreover, 91.8 percent of the program spending reported by the Greenpeace Fund ($5,532,949 + 4,300,000 = $9,832,949 of the $10,708,287 total) is grants to affiliated organizations that do not receive preferred tax treatment. Financial information for Greenpeace International is unavailable, presumably because the international organization does not solicit funds in the United States. If we assume that the program-spending ratio for Greenpeace International is comparable to that for Greenpeace Inc., then net resources contributed to Greenpeace Fund that are ultimately distributed to program activities is 74.2 percent of total expenditures ($10,708,287 − 9,832,949 + 76.6% of $9,832,949 = $8,407,377; $8,407,377/11,336,949 = 74.2%). This ratio is less than, but close to, the estimated ratio in Table 3, Column (C).

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[9] A characteristic of regression is that observations above mean values for the dependent variable (above the mean program-spending ratio in this case) tend to have positive residuals by construction, and therefore, both the direction and the magnitude of this difference need to be interpreted cautiously. To this end, we report the percentile of the entry in the distribution of all 292 observations parenthetically in columns (A), (C), and (E) in Table 3 and the rank of the entry relative to the six organizations considered in columns (B), (D), and (F) in Table 3.

[10] Our research indicates that the Sierra Club is similarly organized.

TABLE 3
Comparisons of Actual with Predicted Mean Ratios of Program to Total Expense for Selected Environmental Organizations

Organization	(A) Reported Program Ratio	(B) Rank	(C) Predicted Program Ratio	(D) Rank	(E) Actual Ratio Less Predicted Ratio	(F) Rank
Revenue-Maximizers						
Greenpeace Fund	0.905 (88)	1	0.787 (61)	6	0.118 (85)	1
National Audubon Society	0.798 (53)	5	0.818 (78)	4	−0.020 (36)	5
Sierra Club	0.840 (70)	4	0.819 (79)	3	0.021 (53)	3
Cost-Minimizers						
Save the Redwoods	0.902 (86)	2	0.848 (89)	2	0.054 (67)	2
Conservation International	0.846 (72)	3	0.858 (91)	1	−0.012 (40)	4
Inform	0.767 (43)	6	0.808 (75)	5	−0.045 (26)	6
All Organizations (n = 292)	0.762	NA	0.762	NA	0.000	NA

Entries in column (A) are means of ratios of program to total expense (mean PGMEX); column (C) are mean ratios estimated from the regression of program-spending ratio (PGMEX) on organization size (LNREV) and charitable objective (TYPE); column (E) are differences between actual and predicted ratios. Percentiles from the distribution of means for all 292 observations are displayed parenthetically. Columns (B), (D), and (F) indicate ranks for the respective measures.

TABLE 4
Selected Fiscal 1997 Financial Information for
Greenpeace Fund, Inc. and Greenpeace, Inc.

	Greenpeace Fund, Inc.	Greenpeace, Inc.
IRS classification	501(c)(3)—contributions are tax deductible	501(c)(4)—contributions are not tax deductible
Total revenue and support	$ 9,490,843	$18,821,719
Total expense	11,336,949	17,933,818
Program expense	10,708,287	13,733,479
Grants from Greenpeace Fund to Greenpeace, Inc.	5,532,949	5,532,949
Grants from Greenpeace Fund to Greenpeace International	4,300,000	—
Program-spending ratio (reported)	94.4%	76.6%

Information is from the 1997 annual report for Greenpeace USA.

Our investigation reveals other unusual practices by Greenpeace USA. For example, we learn from Part II of the 1997 Form 990 filing that most of the program spending that is not distributions to affiliated organizations ($791,304 of the net $10,708,287 − 9,832,949 = $875,338) is allocations of joint costs of combined educational and fund-raising campaigns where the treatment as program spending is dubious (Roberts 2000). Moreover, the CBBB-PAS (1997) report indicates that "Greenpeace Fund has...no paid staff members...but that the fund reimburses its affiliate, Greenpeace, Inc. for certain payroll and administrative expenses provided to the Fund."

Thus, our investigation of the difference between reported and predicted program-spending ratios tempers our initial impression that the Greenpeace Fund is particularly efficient in distributing contributed resources. The investigation also supports an assertion by NCIB (1996b, 1) that "Greenpeace Fund is primarily a fund-raising and grant-making entity, working for the benefit of Greenpeace International and Greenpeace, Inc., its U.S. based affiliate."

CONCLUDING REMARKS

Our objective is to demonstrate how considering strategic positioning is a critical first step in conducting financial statement analyses of charitable organizations. We focus on program-spending ratios reported by six well-known environmental charities to illustrate the approach, but the point of the analysis is generic. Our principal findings are:

- An informed evaluation of the financial statements of charities requires understanding the implications of strategic positioning.
- A statistical approach is helpful in considering strategic differences among charities.
- Organizations with financial profiles that deviate from expectations based on statistical analysis need to be investigated in detail before drawing definitive conclusions about performance.

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