

# The Role of Nonprofit Endowments

Raymond Fisman\*and R. Glenn Hubbard  
COLUMBIA UNIVERSITY AND NBER

## Abstract

We consider the role of the endowment in nonprofit organizations. Nonprofit managers often describe the endowment, or fund balance, as serving a precautionary savings function. We provide a description of endowment size, for nonprofit organizations in a wide range of industries in the United States, and find that a large number of organizations have endowments that exceed levels that would normally be considered to be appropriate from a consumption smoothing prospective. We suggest that this may be the source of governance difficulties within the organization, analogous to the classic problem in corporate finance described by Jensen (1986). We describe a number of potential approaches to mitigating these governance concerns, and provide some preliminary evidence of the role of government regulation in reducing governance problems.

---

\*Corresponding Author: Associate Professor, Graduate School of Business, Uris 614, Columbia University, New York, NY 10027, (212) 854-9157, Fax: (212) 316-9219, Email: [rf250@columbia.edu](mailto:rf250@columbia.edu)

Theories of nonprofit organizations have generally centered on the motivations of not-for-profit entrepreneurs.<sup>1</sup> Regardless of the motivations of the nonprofit's founder, however, a key connecting idea among these theories is the assumption of the nondistribution constraint as the defining characteristic of the nonprofit form (Hansmann, 1996). In this paper, we take this definition of nonprofits as a point of departure, and discuss the implications for the financial structure and governance of nonprofit organizations, regardless of their underlying motivations. In a for-profit organization, shareholders act as the residual bearers of risk. Because nonprofits, by definition, have no residual claimants, there must be some other means of absorbing shocks that exist in a world of uncertain donations and uncertain needs for program expenditures. One possibility would be to simply allow for shocks to revenue streams to be passed on to program expenditures, thus effectively making the recipients of an organization's services bear the burden. However, a desire for “production smoothing” naturally leads to a search for an alternative buffer. Thus nonprofit organizations will hold precautionary savings in the form of endowment fund balances, to protect against adverse revenue shocks.

In this paper, we take a preliminary step in empirically the role of the endowment in nonprofit organizations. We begin by describing, across industries, the endowment characteristics of nonprofit organizations. We further provide some preliminary regression results on endowment intensity that are suggestive of a precautionary saving motive for endowments. This need to maintain a fund balance to smooth the provision of

---

<sup>1</sup> More precisely, most theories of nonprofits are based on one of two ideas: (1) a desire to provide a product at the low marginal cost of production, perhaps due to externalities created by the good (see, for example, Weisbrod, 1988); or (2) an interest in signaling the production of a high-quality good where quality is difficult to observe or verify (e.g., Hansmann, 1996; Glaeser and Shleifer, 2000).

services potentially leads to problems of governance and managerial discretion. This observation is obviously related to familiar themes in corporate finance, which has often focused on the agency problems created by giving managers access to discretionary funds in for-profit organizations (e.g., Jensen, 1986). The problem is that, given the opportunity, for-profit managers will 'steal' from the firm, by consuming perquisites in one form or another. A similar question arises for donors to nonprofit organizations. On the one hand, there is a need for a fund balance to smooth consumption. On the other hand, managers may take advantage of these funds to pursue pet projects or even pay themselves higher salaries. Two possible solutions exist: donors may insist that funds be spent right away, thereby ensuring that their donations are put to good use at the expense of the production smoothing ability of the organization.<sup>2</sup> Alternatively, donors may rely on monitoring technologies that guarantee that all funds, both present and future, are spent appropriately. We describe some of the modes of oversight and monitoring that might be used to curb malfeasance, and suggest some empirical implications of our framework for future work.

The rest of the paper is structured as follows: In section I, we describe the process of endowment generation and donor behavior that we believe governs nonprofit organizations. Section II provides a discussion on potential measures of governance in nonprofits. In section III, we provide details on the IRS data that we use to examine organizations' endowments. Our results on patterns of endowments and precautionary savings are presented in section IV. In section V, we undertake a preliminary

---

<sup>2</sup> Note that this more commonly takes the form of donations of products (e.g., medicine to aid organizations or books to a library) rather than cash donations that must be spent immediately. From a saving perspective, the effect is the same.

investigation in the link between governance and endowment intensity; section VI concludes.

### **I. Donations and Endowments in Nonprofit Organizations**

Consider first the problem faced by a not-for-profit entrepreneur who derives utility from providing a good, for which the equilibrium market price will not cover average cost.

This entrepreneur must therefore raise donations from like-minded donors, who similarly obtain utility from the provision of this good. By assumption, consumers and donors of the nonprofit's output are not identical.<sup>3</sup> Donors are therefore required to provide funds to the entrepreneur, with the assumption that he will use them to further the stated mission of the organization i.e., by producing the good that the organization was established to provide.

Within this model, we introduce the following complication: Very often, an organization is faced with uncertain circumstances with regard to revenue and cost streams. This may be driven by uncertainty over future demand for the organization's services, future donations, or changes in input prices. For example, consider the circumstances of the Riverside Church Soup Kitchen, whose mission is to feed the homeless of upper Manhattan, following the stock market decline of 2000-2001. This simultaneously increased the demand for its services, while reducing the capacity of its donor base to provide funding. Assuming that this is a temporary shock, the organization may be forced to cut back services exactly when the need is greatest. An alternative is for the entrepreneur to hold funds in reserve, as precautionary savings, for situations

---

<sup>3</sup> See preceding references, such as Hansmann (1996) and Glaeser and Shleifer (2000) for reasons that this might be the case.

where the organization faces a shortfall. This is what is commonly referred to as an endowment, or fund balance. This may be used as a buffer in circumstances where that exists a gap between what donors provide and what is required for program services. Endowments are often described in these terms, as a fund to protect the organization from 'rainy days.'

However, as noted in the introduction, providing managers with this precautionary savings device may allow him to 'steal' from the organization, by pursuing interests that diverge from those of the donors, or by consuming perquisites, or by potentially even taking inappropriate financial compensation. Having recognized this danger, donors and society more broadly may wish to impose conditions that restrain nonprofit management from taking inappropriate actions. This may include government monitoring or by donors; we consider some of the mechanisms in use in the following section, in some greater detail. Furthermore, if donors know that they will be expropriated by providing an endowment to the entrepreneur they may choose to limit the discretionary funds available to managers in the first place.

Now, the preceding story is premised on two basic assumptions: (a) that it is easier for managers to pursue personal interests with endowment funds rather than streams of revenue, and (b) that donors have some incentive to provide managers with an endowment, rather than simply providing funding on an annual basis. We now provide some evidence in support of these assumptions.

### A. Expropriation of the Endowment

Application of our argument to endowment expropriation follows closely agency models, which emphasizes that providing managers with discretionary funds may lead to governance problems. In such a setting Jensen (1986) argues, for example, that organizations should hold high levels of debt, so all cash inflows must be used to service this debt and stave off bankruptcy, which will cause the manager to lose his job.

Analogously, in a nonprofit firm, if the organization has very little cushion in the form of an endowment, all cash inflows will be required to meet the organization's basic mission requirements, leaving relatively little scope for expropriation. Furthermore, to the extent that the organization faces binding constraints, and donations are made for particular purposes,<sup>4</sup> expropriation may be difficult.

The popular press is littered with examples that illustrate this distinction between endowment and revenue expropriation. For example, in a particularly high-profile case in 2000, three former officials of Allegheny Health Education were arrested and charged with diverting \$52 million in charitable endowments, for "inappropriate and personal uses." The case of the Bishop Estate, a charitable trust created in 1884 by one of the last members of Hawaii's royal family, that provides a particularly compelling illustration of these ideas. The Bishop Estate held an endowment, worth \$10 billion in 1997, which in the words of the Honolulu Star, "*apparently proved to be too much of a temptation for the estate's five trustees. Their misdeeds, as revealed by government investigations and newspaper reports, demonstrate how loose control and operation of a nonprofit organization can be disastrous.*" Funds were diverted for purposes that furthered the

---

<sup>4</sup> For example, in a case related to one of the authors, a donor told of donating storm windows to his daughter's private school, because he was sure that this would not be a fungible donation.

financial interests of the stewards of the endowment, through such mechanisms and political donations and direct investment in trustee-owned companies.

### *B. Endowment Expropriation and Donors*

Given this potential for expropriation, the question of why donors ever allow for endowments in the first place, rather than simply promising to make up for shortfalls in the future. One answer draws once again on an analogy from research in corporate finance: one of the difficulties with Jensen's arguments for constraining managers is that management may have preferential information on the nature of investment opportunities, so it will be useful to provide them with some discretionary resources. Similarly, nonprofit managers may have a better sense of the needs of their organizations, so it may be beneficial for them to have some discretionary funds available when needs arise. It may be costly for management to have to petition donors for additional funds whenever unexpected needs arise. More generally, the transactions costs associated with the 'meeting the shortfall' could be substantial.

Another possibility comes from a closer consideration of what exactly the nonprofit is 'selling' to its donors. Casual observation suggests that much donation revenue is motivated by a desire for fame in perpetuity. This factor could lead to endowments for two reasons: nonprofit managers may thus be better positioned to extract endowment funds from donors, through techniques such as 'naming rights.' Furthermore, the willingness of others to give to a nonprofit may increase with the endowment of the nonprofit, which guarantees its permanence. As such, any individual donor can get other donors to commit more if that donor commits his or her own money, not just for current

expenses, but also for future expenses. In either case, a discretionary fund results for the manager, which may allow for the aforementioned expropriation to occur. We then must consider what steps may be taken to limit the extent of this expropriation.

## **II. Modes of Governance**

There are a number of potential watchdogs that could mitigate the endowment expropriation potential described in the preceding section. We consider here three possibilities: government oversight, media oversight, and donor oversight.

### *Government Oversight*

Society, broadly defined, may choose to monitor nonprofits to prevent expropriation. Just as the Securities and Exchange Commission was established to prevent the expropriation of investors in for-profit firms, several governmental organizations exist to mitigate expropriation in nonprofits. Both federal and state-level bodies exist to oversee nonprofits. These bodies essentially enforce laws that are meant to ensure that the organization's resources are used to pursue the organization's stated mission, and to prevent the expropriation of value by insiders.<sup>5</sup> For example, the IRS regulations passed in 1998 provide specific guidance to charitable organizations on what constitutes appropriate financial compensation of executives, and further provides for penalties if these regulations are not adhered to.

---

<sup>5</sup> More details on regulations from Minnesota may be downloaded from the website of the Minnesota Attorney General: <http://www.ag.state.mn.us/charities/Default.htm>; the website also contains links to the sites of other Attorneys General. IRS regulations may be downloaded from <http://www.irs.gov/exempt/display/0,,i1%3D3%26genericId%3D15048,00.html>.



Primary responsibility for the legal oversight of nonprofits, however, devolves to the level of the state.<sup>6</sup> While IRS oversight may be uniform across the country, there exist vast differences across the states in the extent of local oversight. The Office of the Ohio Attorney General carefully documented these differences in a report in 1974. As the authors of the article emphasize, there remain dramatic differences in the resources allocated to oversight of nonprofits, as well as the scope for actions against nonprofits by the state attorneys general.<sup>7</sup> The report emphasized eight possible powers, spelled out in Appendix 1; each state's score is listed in Appendix 2. These figures are based on the regulation of nonprofits in 1974, which is the most recent information available. There have been almost no changes since then in state-level nonprofit statutes (personal communication, Marion Fremont-Smith, Harvard University).

There is considerable variation in the extent of state-level oversight, and this variation does not seem to be easily explained by income, or by simple geographic proximity. We consider below how some measures of governance vary across states with different levels of oversight.

---

<sup>6</sup> Most legal actions are initiated by state attorney general offices (private communication, Marion Fremont-Smith).

<sup>7</sup> One may be concerned that nonprofit regulation is of limited relevance, unless states devote significant resources to enforcing these regulations. In the same report cited above, the Office of the Ohio Attorney General also collected data on the human resources devoted to the enforcement of nonprofit regulation. The number of full-time employees devoted to enforcement, deflated by state population, is highly correlated with the extent of regulation, as measured in our study. Moreover, when we use this as a measure of governance, it yields similar (though slightly weaker) results to our law-based definition. Alternatively, examining actual convictions for misconduct is unlikely to be revealing, because effective enforcement will increase the proportion of illegal acts that are uncovered, but will reduce the number of such acts that are committed.

### *Media Oversight*

While the State Attorney General is the primary enforcing body for nonprofits, very often cases come to light because of the activities of the media. This may be in the form of traditional investigative reporting; for example, the Bishop Estate case described above was originally brought to light through the work of a journalist. Furthermore, the media may play a role in discipline in managerial discretion that is inappropriate, though not strictly legal.

This element to oversight has increased in visibility recently, as several watchdog organizations have taken advantage of the Internet to disseminate information about the quality of nonprofit governance. The most prominent among these include the Better Business Bureau and Guidestar. Generally, these organizations provide basic accounting information on charitable organizations, and also attempt to evaluate their governance structures. This includes information on program spending (relative to fundraising) ratios, executive compensation, and the structure of the board, which may also be relevant for the extent of expropriation.

We have not yet compiled data that might be used to examine the media as a source of oversight. Numerous possibilities exist, however, including: media penetration, by city/state; coverage by media watchdogs; and ratings from these watchdog organizations.

### *C. Board and Donor Oversight*

Underlying much of the discussion on donor oversight is the role of the board of directors, who are owners of the organization in the sense that they are given ultimate

decision making rights over the organization's assets. As such, just as the board of a for-profit organization acts on behalf of shareholders, nonprofit boards may act on behalf of donors. Furthermore, just as large shareholders may demand representation on for-profit boards, large donors may demand representation on nonprofit boards.

The analogy between for-profit and nonprofit boards further allows us to develop some hypotheses as to the characteristics that may promote good governance. These include representation of large donors on the board ('shareholder representation'); the presence of large donors that may be expected to monitor on behalf of the broader donor community, thereby overcoming the free rider a problem in monitoring ('ownership concentration'); outside representation on the board; non-compensation of board members; etc. Many of the latter examples are spelled out in the governance guidelines for boards given by the Better Business Bureau. We therefore expect to be able to collect information on these dimensions of governance in the future. At this point, we can only say loosely that there appears to be considerable variation among organizations in the choice of governance structures.

Examining the various dimensions of oversight and governance described above is an important avenue for research. For example, do varying degrees of state oversight lead to different levels of monitoring by other bodies; i.e., are boards more active in the absence of strong government pressure. Alternatively, one could easily imagine that different oversight mechanisms act as complements; e.g., the media is only effective in bringing about change if accompanied by strong legal enforcement.

### III. Data

For this paper, we concentrate on charitable nonprofit organizations (so-called 501(c)3 organizations, named for the section of the U.S. federal income tax code that gives them tax-exempt status), making use of the IRS Statistics of Income files. This is a data set compiled by the National Center for Charitable Statistics (NCCS) at the Urban Institute, which is derived from data taken from the Form 990 that tax-exempt organizations must file with the IRS. These data contain all 501(c)3 organizations with more than \$10 million in assets plus a random sample of approximately 4,000 smaller organizations. Most financial variables on the Form 990 are included, and the data are considered to be more reliable than the data in the IRS's unedited files because of the substantial error checking by the NCCS.<sup>8</sup>

Our measure of the endowment, or net assets, is from the Form 990; this is simply total assets less total liabilities (ENDOWMENT).<sup>9</sup> Research on nonprofit organizations generally uses the term endowment to refer to a restricted fund for which, at least in theory, the principal cannot be spent. They are therefore careful to make a distinction between restricted (endowment) and unrestricted (fund balance) funds. We do not believe that such a distinction is necessary here: Restricted (endowment) funds are held primarily by large educational institutions and hospitals. These organizations are generally able to borrow against the value of their endowments, and may furthermore use the interest

---

<sup>8</sup> For more details, see the NCCS WebSite at <http://nccs.urban.org/index.htm>.

<sup>9</sup> An alternative, and perhaps more direct, measure of the endowment is the organization's holdings that could potentially be used to finance program expenditure. More precisely, we may use:

$$\text{ENDOWMENT} = \text{CASH} + \text{BANK DEPOSITS} + \text{SECURITIES} + \text{REAL ESTATE INVESTMENT}$$

This measure is very highly correlated with reported fund balance ( $\rho=0.96$ ), and using it as an alternative yields virtually identical results (available from the authors).

generated by the endowments to make interest payments on their loans. Particularly given that these organizations are generally able to issue tax-exempt bonds, it would appear that the restriction on endowment payout is not binding.

We require some means of scaling endowment size; we deflate by annual total expenses (EXPENSES), which lends itself to a natural interpretation:

ENDOWMENT/EXPENSES reflects the number of years that the organization may continue to operate at its current scale, finance solely by the endowment.

In examining the determinants of endowment size, we require variables that are related an organization's ability to cope with financial shocks, other than using the endowment as a buffer. We focus on labor intensity and access to alternative financing. We measure labor intensity by the ratio of total wages to total expenses (LABIN).<sup>10</sup> To proxy for access to financing, we use a dummy variable that takes on a value of one if the organization obtained a loan during the decade 1987-96 (DEBT). Obviously, there is an offsetting effect here: organizations with large endowments may borrow against their endowments, thereby generating a positive relationship between DEBT and endowment intensity. Hence, in this case, there is a bias against finding a negative relation.

The SOI files contain annual observations on between 10,000 and 12,000 organizations per year, varying by year, for 1987-96, with approximately 18,000 organizations filing in at least one year. Prior to 1987, the data were collected on a much smaller sample of organizations. We limit our analyses to the approximately 5300 organizations that filed with the IRS every year during this period. After removing mutual organizations, dominated by TIAA-CREF, grant-making foundations and trusts,

---

<sup>10</sup> An alternative measure of labor intensity would be to deflate by physical capital. However, because physical capital is a significant part of the endowment, it would be almost tautological to have such a variable on the right-hand side of the regression.

and organizations whose industry is 'unknown', the sample is reduced to 5007 organizations. We also limit the sample to organizations that consistently report sensible values for the variables that are central to our analyses. We remove organizations with negative reported revenues or expenses, a 1987 endowment rate of greater than 100, and a negative ratio of private donations to revenues. These omissions result in a further reduction of 461 firms, leaving a total of 4546 organizations.

Table 1 presents summary statistics for the entire sample, while Table 2 presents the distribution of median values by industry for a subset of variables. As Table 2 makes clear, the sample is dominated by health-care organizations, which are primarily hospitals. Because hospitals tend to be larger than other nonprofits, health care is even more dominant in the revenue-weighted distribution of organizations (see column (1)). However, the representation of hospitals does not increase, relative to the simple headcount measure, when organizations are weighted by their endowments (see column (2)); rather, the endowment weighting shifts the focus to educational institutions. This is a reflection of educational institutions' large organizational size as well as their relative endowment intensiveness.

#### **IV. Endowment Intensity and Precautionary Savings**

In the estimates presented in Table 3A and 3B, we move from examining the distribution of organizations across industries to looking at organizational characteristics, by industry. We begin by looking at the variable of primary interest: endowment intensity (Endowment/Expenses). Not surprisingly, given the results from Table 2, endowment intensity is by far the lowest among hospitals. Of the other categories, we

observe a particularly high rate of endowment intensity among arts organizations. The second column in Table 3A suggests one element to this pattern: a much larger proportion of revenues comes from donations (rather than generated income) in arts organizations, relative to hospitals. However, health-care appears to be systematically different from other nonprofit activities; in particular, the median donation rate is significantly below that of other sectors. In general, as numerous scholars have noted (see, for example, Weisbrod, 1998), hospitals behave increasingly like for-profit organizations; accordingly, we also report empirical results for nonprofit organization samples including and excluding hospitals, where appropriate.

The data in Table 2 and 3A are suggestive of relatively high endowment-to-expense ratios in many industries; moreover, there is considerable variation across industries. We may tentatively examine whether there may be systematic industry differences that could possibly lead to differences in endowment intensity, by comparing industries' (a) potential to take on debt, (b) ability to maintain a labor-intensive production process, and (c) level of cash flow volatility (proxied by standard deviation of revenues). Table 3B reports these patterns. Again, we focus on the three largest industries: arts, education, and health-care. Systematically, arts and education organizations appear to have a greater 'need' for endowments, relative to health-care organizations: they are less labor-intensive expense ratios, less likely to have taken a loan, and have more volatile revenue streams.

Table 4 presents results describing industry median endowment intensity and the effects of the three aspects of precautionary savings described above. Each measure of

'endowment need' enters with the expected sign; however, when all measures are included simultaneously, the loan dummy variable is no longer significant.

## **V. Endowment Intensity and Governance: Preliminary Results**

The extent to which an organization has precautionary savings requirements will depend upon its specific circumstances. However, as a rough guide for examining the summary statistics, we take the National Center for Nonprofit Boards guidelines that, "not more than two years' expenses" should be held as an endowment. By this measure, the median organization in many industries in our sample already exceeds the suggested level of endowment intensity. Furthermore, the distributions within each industry suggest that there are relatively fat tails in the range of endowment intensities. This point is illustrated in Table 5, which lists the 10<sup>th</sup> and 90<sup>th</sup> percentiles of endowment intensity, by industry. In particular, among both arts and educational organizations, the top 10 percent of organizations by endowment ratio have more than ten years' expenses in endowment.

Our measure of the extent of oversight comes from variation in oversight across states, as described in section III above.<sup>11</sup> Table 6 presents results relating endowment intensities by level of oversight, where 'oversight' is measured by the number of powers accorded to the State Attorney General in monitoring and punishing nonprofits.

Somewhat surprisingly, there are no systematic differences across states in terms of a relationship between oversight and endowment intensity. This finding likely reflects a differential composition of industries across states; the role of substitute modes of

---

<sup>11</sup> Unfortunately, collecting appropriate information on board oversight is not feasible at this time. We obtained measures of media presence, by state, such as newspaper circulation per capita, and number of newspapers, by city. We do not believe that these are reliable indicators of the *quality* of media presence, and leave each of these areas as possible avenues for further research.



governance in low-oversight states, donors' reaction to poor governance by 'starving' nonprofits so that they are unable to grow to have sizeable expenses (the denominator of the dependent variable), and the result of the endogenous development of state oversight (i.e., enforcement is strongest where self-dealing by nonprofits is most likely). The first of these factors does not seem to explain this 'non-result'; oversight is still insignificant in a regression that controls for industry affects. Better data on other modes of governance are necessary to differentiate among the various other competing explanations.

In Table 6, we also examine a related margin – donation intensity, defined as the ratio of an organization's donations to total revenues. The summary statistics again do not show a clear pattern. However, in Table 7, in which we control for industry effects, a systematic relationship emerges. While the simple binary regression does not suggest a significant relationship between state-level oversight and donation intensity, after we add basic controls, the estimated coefficient on Oversight is statistically significantly different from zero at the five percent level, allowing for state-level clustering of standard errors. Thus, in states with higher oversight, we observe more 'donation-intensive' organizations. This is at least suggestive that better oversight by the state encourages donors to provide resources to nonprofits.

Unfortunately, data availability constrains our ability to estimate the relationship between governance and the endowment. We are now collecting the data described in section II but we intend to examine the endowment-governance link more closely in future research.

## **VI. Conclusion**

Nonprofit organizations constitute an extremely important part of the U.S. economy. It is therefore surprising how little attention economists have paid to the behavior of such organizations. In this paper, we examine some fundamental issues of governance in nonprofits that stem directly from the nondistribution constraint that defines the nonprofit form. A precautionary saving model of the endowment is supported by the data. We further examine the possibility that endowments may be the source of potential governance problems in nonprofit organizations. In particular, we draw parallels between the functioning of for-profit and nonprofits, and on this basis, lay out a framework for examining governance concerns raised by nonprofit endowments. We discuss steps that governments and donors may take to mitigate these concerns, and discuss potential data sources for work in this area.

## References

- Fazzari, Steven, R. Glenn Hubbard, and Bruce Petersen, "Financing Constraints and Corporate Investment," *Brookings Papers on Economic Activity*, no. 1, 1988, pp. 141-95.
- Glaeser, Edward, and Andrei Shleifer, "Not-for-profit Entrepreneurs," *Journal of Public Economics*, forthcoming.
- Hallock, Kevin. "Managerial Pay and Governance in American Nonprofits." Manuscript, 2000.
- Hansmann, Henry. *The Ownership of Enterprise*, Cambridge: Harvard University Press, 1996.
- Himmelberg, Charles, R. Glenn Hubbard, and Inessa Love. "Investor Protection, Ownership, and Investment," Working Paper, Columbia University, 2001.
- Hubbard, R. Glenn. "Capital-Market Imperfections and Investment," *Journal of Economic Literature*, vol. 36, March 1998, pp. 193-225.
- Jensen, Michael. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers," *American Economic Review*, vol. 76, no. 2, May 1986, pp. 323-29
- La Porta, Rafael, Florencio Lopez-di-Silanes, Andrei Shleifer, and Robert Vishny, "Investor Protection and Corporate Governance," *Journal of Financial Economics*, forthcoming.
- Office of the Ohio Attorney General, "The Status of State Regulation of Charitable Trusts, Foundations, and Solicitations," in *Research Papers Sponsored by The Commission on Private Philanthropy and Public Needs*, Washington D.C.: Department of the Treasury, 1977.
- Shleifer, Andrei, and Daniel Wolfenzon. "Investor Protection and Equity Markets," Manuscript, 2001.
- Weisbrod, Burton. *The Nonprofit Economy*, Cambridge: Harvard University Press, 1988.
- Weisbrod, Burton. *To Profit or Not to Profit*, Cambridge: Cambridge University Press, 1998.

**Table 1:** Summary Statistics

	Mean	Std. Dev.	Min	Max	Obs
ENDOWMENT (\$1,000)	39736.24	159664.90	0	5207517	4546
Endowment/Expenses	3.17	6.75	0	98.62	4546
log(Endowment/Expenses)	1.00	0.77	0	4.60	4546
Expenses (\$1,000)	33436.97	101734.80	9.671	4039460	4546
Revenues (\$1,000)	36431.88	108203.10	6.608	4108413	4546
Private Donations/Revenues	0.14	0.21	0	1	4546
(Labor Costs)/(Total Expenses)	0.41	0.20	0	0.89	4546
Loan Dummy	0.67	0.47	0	1	4546
Private Donations (\$1,000)	2642.20	14095.07	0	667663	4546

Source: Authors' calculations

**Table 2:** Distribution of Organizations, Weighted by Size

	% of Total Revenue	% of Total Value of Endowment	% of Total Organizations
Arts	2.25	4.17	6.03
Education	26.67	49.32	29.45
Environment	0.11	0.26	0.86
Animal Related	0.21	0.38	0.81
Health	61.89	34.53	37.62
Mental Health	0.31	0.23	1.36
Diseases	0.76	0.51	1.08
Medical Research	0.53	3.43	0.97
Crime, Legal Related	0.12	0.08	0.37
Employment, Job Related	0.07	0.07	0.66
Food, Agriculture, and Nutrition	0.01	0.01	0.09
Housing, Shelter	0.06	0.06	1.21
Public safety	0.04	0.02	0.24
Recreation/sports	0.18	0.23	0.79
Youth Development	0.16	0.25	1.19
Human services	2.76	3.66	11.92
International/Foreign affairs	1.11	0.65	0.99
Civil Rights/Social Action	0.04	0.03	0.15
Community Improvement	0.18	0.28	1.12
Science research	1.86	1.06	1.32
Social science research	0.15	0.18	0.33
society benefit	0.27	0.29	0.48
Religious	0.26	0.28	0.92

**Table 3A: Median Endowment Intensity and Donation Intensity, by Industry**

	<u>Endowment</u> Expenses	<u>Donations</u> Revenues
Arts	3.56	0.345
Education	2.41	0.196
Environment	3.54	0.404
Animal Related	4.06	0.323
Health	0.63	0.033
Mental Health	0.68	0.079
Diseases	0.83	0.188
Medical Research	2.43	0.297
Crime, Legal Related	0.66	0.284
Employment, Job Related	0.82	0.037
Food, Agriculture, and Nutrition	2.24	0.421
Housing, Shelter	0.92	0.108
Public safety	2.83	0.159
Recreation/sports	1.86	0.235
Youth Development	2.01	0.264
Human services	1.38	0.149
International/foreign affairs	0.83	0.380
Civil Rights/Social Action	0.94	0.664
Community Improvement	1.82	0.128
Science research	1.08	0.102
Social science research	2.32	0.277
Society benefit	0.99	0.216
Religious	2.50	0.440

**Table 3B: Organizational Characteristics that Affect Endowment Intensity: Medians**

	Received Loan	Labor Intensity	Volatility
Arts	0.38	0.40	0.24
Education	0.67	0.45	0.14
Environment	0.41	0.41	0.30
Animal Related	0.24	0.44	0.19
Health	0.81	0.48	0.15
Mental Health	0.65	0.55	0.18
Diseases	0.39	0.31	0.12
Medical Research	0.27	0.43	0.21
Crime, Legal Related	0.18	0.39	0.17
Employment, Job Related	0.53	0.59	0.19
Food, Agriculture, and Nutrition	0.00	0.38	0.28
Housing, Shelter	0.87	0.17	0.19
Public safety	0.73	0.10	0.14
Recreation/sports	0.22	0.20	0.20
Youth Development	0.37	0.48	0.21
Human services	0.64	0.51	0.15
International/foreign affairs	0.36	0.25	0.23
Civil Rights/Social Action	0.43	0.47	0.20
Community Improvement	0.35	0.22	0.25
Science research	0.42	0.30	0.18
Social science research	0.27	0.36	0.19
Society benefit	0.41	0.35	0.19
Religious	0.50	0.24	0.23

**Table 4:** Determinants of Endowment Intensity

Dependent Variable: Endowment/Expenses

	(1)	(2)	(3)	(4)
Volatility	28.81 (5.54)			23.41 (7.45)
Loan Dummy		-3.14 (1.19)		-0.77 (1.48)
Labor Intensity			-7.73 (2.69)	-5.10 (2.68)
CONSTANT	-1.64 (1.00)	5.09 (0.75)	6.46 (1.06)	1.51 (1.99)
R2	0.36	0.14	0.15	0.43
Obs.	23	23	23	23

Notes: Standard errors in parentheses. All regressions use robust standard errors. Volatility is the standard deviation of revenues for each organization during 1987-96. Loan Dummy reflects whether an organization received a loan during 1987-96. Labor intensity is the ratio of labor expenses to total expenses in 1987. In all cases, the dependent variable is the 1987 ratio of endowment to total expenses.



**Table 5: Endowment Intensity, 10<sup>th</sup> and 90<sup>th</sup> percentiles**

	10 <sup>th</sup> percentile	90 <sup>th</sup> percentile
Arts	0.66	12.70
Education	0.91	7.46
Environment	0.35	12.19
Animal Related	1.15	16.61
Health	0.29	2.88
Mental Health	0.11	2.56
Diseases	0.15	4.42
Medical Research	0.55	13.78
Crime, Legal Related	0.09	6.87
Employment, Job Related	0.19	5.04
Food, Agriculture, and Nutrition	0.26	15.76
Housing, Shelter	0.19	5.97
Public safety	0.14	18.42
Recreation/sports	0.38	10.88
Youth Development	0.75	7.80
Human services	0.20	6.23
International/foreign affairs	0.09	10.13
Civil Rights/Social Action	0.58	4.38
Community Improvement	0.32	26.56
Science research	0.23	8.05
Social science research	1.05	6.11
Society benefit	0.27	10.39
Religious	0.41	14.24

**Table 6: Median Endowment and Donation Intensities, According to Oversight by State Attorney General**

Level of Oversight	Endowment Intensity	Donation Intensity	Observations
0	1.05	0.01	125
1	1.17	0.03	349
2	1.03	0.02	1029
3	1.41	0.08	635
4	1.67	0.06	193
5	1.00	0.01	150
6	1.23	0.05	1478
7	1.00	0.05	493
8	1.05	0.01	125

Oversight is defined by the number of powers accorded to the state attorney general in overseeing nonprofits. See Appendix I for further details. Endowment Intensity is the 1987 ratio of endowment to total expenses. Donation Intensity is the 1987 ratio of donation revenue to total revenue.

**Table 7: Determinants of Donation Intensity**

Dependent Variable: Donation Intensity

	(1)	(2)	(3)	(4)
Oversight	0.0037 (0.0025)	0.0047 (0.0023)	0.0053 (0.0023)	0.0036 (0.0016)
Log(Per Capita Income)			-0.027 (0.039)	-0.084 (0.024)
Log(Revenues)		-0.040 (0.0020)	-0.040 (0.0020)	-0.024 (0.0026)
CONSTANT	0.12 (0.015)	0.77 (0.041)	1.03 (0.39)	
Industry Fixed Effects?	No	No	No	Yes
R2	0.002	0.11	0.11	0.30
Obs.	4456	4456	4456	4456

Notes: Standard errors in parentheses. All regressions use robust standard errors, allowing for state-level clustering. Oversight is defined by the number of powers accorded to the state attorney general in overseeing nonprofits, and takes on values from zero to eight. See Appendix I for further details. Log(Per Capita Income) is state per capita income in 1987. Log(Revenues) is the log of total revenues in 1987. The dependent variable in all cases is Donation Intensity, the 1987 ratio of donation revenue to total revenue

## **Appendix 1: Powers of the State Attorneys General in Nonprofit Oversight**

Thanks to the United States' common law heritage, most regulation of nonprofits devolved to the states, which exhibit a very large amount of variation in their extent of oversight. Almost uniformly, the power to monitor and prosecute nonprofits has been allocated to the State Attorney General. The Office of the Ohio Attorney General has documented the basic legislative enactments that allow the state Attorney General to oversee nonprofit organizations, and how these basic enactments vary across states. The eight statutes covered by the report are listed below; for further details, see Commission on Private Philanthropy and Public Needs, 1977).

1. Is the Attorney General the enforcing authority?
2. It is the Attorney General a necessary party for enforcement?
3. Does the Attorney General have the power to institute suits to enforce the charitable trust?
4. Is registration with the Attorney General required?
5. Are periodic reports to the Attorney General required?
6. Does the enforcing authority have subpoena power?
7. Does the enforcing agency have rulemaking authority?
8. Are probate judges required to notify the enforcing authority whenever a will containing a charitable bequest is admitted?

**Appendix 2: State-level Oversight by Attorneys General**

Alabama	0	Montana	0
Alaska	0	Nebraska	1
Arizona	0	Nevada	8
Arkansas	1	New Hampshire	2
California	8	New Jersey	2
Colorado	2	New Mexico	2
Connecticut	3	New York	7
Delaware	1	North Carolina	3
Florida	1	North Dakota	2
Georgia	7	Ohio	7
Hawaii	2	Oklahoma	1
Idaho	3	Oregon	7
Illinois	7	Pennsylvania	2
Indiana	2	Rhode Island	8
Iowa	4	South Carolina	5
Kansas	1	South Dakota	3
Kentucky	3	Tennessee	2
Louisiana	0	Texas	3
Maine	3	Utah	1
Maryland	2	Vermont	2
Massachusetts	7	Virginia	4
Michigan	7	Washington	8
Minnesota	3	West Virginia	1
Mississippi	1	Wisconsin	5
Missouri	2	Wyoming	1

Source: Commission on Private Philanthropy and Public Needs, 1977.