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The Problem of Nonprofit Executive Pay?: Evidence from U.S. Colleges and Universities

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THE PROBLEM OF NONPROFIT EXECUTIVE PAY?: EVIDENCE FROM U.S. COLLEGES AND UNIVERSITIES

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ABSTRACT

Nonprofit organizations suffer from agency problems that are similar to or perhaps even more severe than those observed at for-profit companies. As a result, one might expect the executive pay setting process in the two sectors to reflect similar deficiencies. This Article explains why the managerial power theory that was developed to help explain for-profit executive pay is plausibly applicable to nonprofits. More importantly, this Article offers new evidence based on data from a large panel of colleges and universities collected across a nine year period that supports the idea that potential stakeholder outrage plays a role in limiting nonprofit executive pay. For example, we find for the first time evidence of an otherwise counter-intuitive negative association between the fraction of university revenue provided by current donations and president compensation. We also are the first to find that excess executive pay reduces donations. These findings support the hypothesis that donors with less leverage suffer from significant agency costs in setting president pay. We discuss the implications of these findings for the regulation of nonprofits and for a broader understanding of the pay-setting process at for-profit as well as nonprofit organizations. For example, we note that our results are consistent with the view that, absent reforms, presidents may have self-interested incentives to increase tuition.

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Introduction

The compensation of the presidents of private U.S. colleges and universities has risen at a rapid clip over the past fifteen years. In the decade between 1998 and 2007, average president pay increased by 50% in real, inflation-adjusted, terms, far outpacing gains in overall university expenditures and even eye-catching increases in tuition rates.[1] In 2010, thirty-six university presidents received pay packages in excess of $1 million.[2]

These data spark questions about the executive pay setting process in this nonprofit sector. Why has compensation increased so dramatically? What explains the variation in pay from school to school? More generally, do the managerial agency problems that many observers believe contribute to outsized pay packages at public companies in the U.S. also play a role at nonprofits, such as these private colleges and universities? [3]

The relationship between managerial agency problems and executive pay has been a central focus of academic research over the last several decades.[4] A key question has been whether pay practices reflect agency problems or mitigate those problems or both.[5] One school of thought---which one of us, together with Lucian Bebchuk and Jesse Fried, dubbed the "managerial power" hypothesis--- suggests that managers at for-profit firms have been able to extract inefficiently high compensation from their employers. [6] The rational ignorance of widely-dispersed shareholders, and managers' strong influence over the directors appointed to watch the managers, leaves some managers constrained mainly by actual or potential "outrage,"

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[1] *See infra* Part III.A.

[2] The Chronicle of Higher Education, Executive Compensation at Private Colleges, 2010: https://chronicle.com/article/Executive-Compensation-at/136165/#id=table (last accessed July 22, 2013).

[3] "Agency" costs arise when stakeholders or principals must rely for direction of the organization on imperfectly-controlled managers or "agents" who do not always act in the best interest of the stakeholders. *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 308--10 (1976).

[4] The literature is both voluminous and highly interdisciplinary. Important contributions have come from law, economics, corporate finance, and accounting, among other fields. Surveys include David I. Walker, *The Law and Economics of Executive Compensation: Theory and Evidence*, *in* RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW 232 (Claire A. Hill & Brett H. McDonnell eds., 2012); Kevin J. Murphy, *Executive Compensation*, *in* 3 HANDBOOK OF LABOR ECONOMICS 2485, 2509–10 (Orley Ashenfelter & David Card eds., 1999); John E. Core et al., *Executive Equity Compensation and Incentives: A Survey*, ECON. POL'Y REV., Apr. 2003, at 27; and Carola Frydman & Dirk Jenter, *CEO Compensation*, 2 ANN. REV. FIN. ECON. 75 (2010).

[5] The traditional view, known as the "optimal contracting" view, is that executive pay arrangements are designed to minimize agency costs by aligning the incentives of managers and owners. *See infra* Part I.A.

[6] Lucian Arye Bebchuk, Jesse Fried & David I. Walker, *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751, 783--86 (2002).

the emotional and ideological responses of the shareholders and press watchdogs who notice what is happening.[7]

As evidence for their claim, managerial-power theorists point to the highly opaque pay structures managers have constructed for themselves.[8] These structures, they say, serve no other important purpose for the firm except to reduce outrage at the amount the managers earn.[9] The managerial power theory is hardly undisputed, though. Critics point to possible justifications for some arcane pay practices.[10] Despite the policy importance of the debate, and the widespread academic interest it has drawn, direct evidence that looming shareholder "outrage," rather than some corporate purpose, motivates the questionable practices is scarce. That is why managerial power theorists have so far had to rely on inference.

To date, the debate has focused primarily on executive pay in the for-profit sector and, in large part, on public company executive pay.[11] There has been relatively little research on executive pay in the nonprofit sector.[12] Commentators recognize that agency problems exist in

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[7] *Id*. at 786-88.

[8] *Id*. at 789; Lucian Bebchuk & Robert Jackson, *Executive Pensions*, 30 J. CORP. L. 823 (2005) (documenting significant utilization of highly opaque executive pension arrangements); *see also infra* Part I.A. (discussing numerous pay practices that are difficult to explain as part of an optimal contract but that are an understandable outgrowth of managerial power);.

[9] Bebchuk et al., *supra* note 5, at 795-96.
Several important recent Wall-Street reforms, such as SEC efforts to improve the disclosure of executive compensation and to grant shareholders a "say on pay," appear to be premised on the idea that latent shareholder discontent can affect corporate behavior. *See* Jeffrey N. Gordon, *"Say on Pay": Cautionary Notes on the U.K. Experience and the Case for Shareholder Opt-In*, 46 HARV. J. ON LEGIS. 323 (2009).

[10] *See, e.g*., Kevin J. Murphy, *Explaining Executive Compensation: Managerial Power Versus the Perceived Cost of Stock Options*, 69 U. CHI. L. REV. 847, 857--67 (2002); John E. Core, Wayne R. Guay & Randall S. Thomas, *Is U.S. CEO Compensation Inefficient Pay Without Performance?*, 103 MICH. L. REV. 1142 (reviewing LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004)). For an overview of the debate in the context of retirement pay for executives, see Kelli A. Alces & Brian D. Galle, *The False Promise of Risk-Reducing Executive Pay: Evidence from Executive Pensions and Deferred Compensation*, 38 J. CORP. L. 53, 57--64, 82--86 (2012).

[11] *See, e.g.,* Murphy, *supra* note 3, Core et al., *supra* note 4, and Frydman & Jenter, *supra* note 4. There is also an emerging literature on executive pay in the private equity/venture capital arena. *See* Philip Leslie & Paul Oyer, *Managerial Incentives and Value Creation: Evidence from Private Equity* 8 (November 2009) (unpublished manuscript), *available at* http://www.stanford.edu/~pleslie/private%20equity.pdf; Robert J. Jackson, Jr., *Private Equity and Executive Compensation* (July 12, 2009) (unpublished manuscript) (on file with author).

[12] *See* Kevin F. Hallock, *Managerial Pay and Governance in American Nonprofits*, 41 IND. REL.: J. ECON. & SOC. 377, 404 (2002) ("Little is known about the compensation of managers of nonprofits…."). For prior discussions of the dynamics of nonprofit compensation in the legal literature, see Roger C. Colinvaux, *Charity in the 21st Century: Trending Toward Decay*, 11 FLA. TAX REV. 1, 37--38 (2011); Peter Frumkin & Alice Andre Clark, *Nonprofit Compensation and the Market*, 21 U. HAWAII L. REV. 425 (1999); Consuelo Lauda Kertz, *Executive Compensation Dilemmas in Nonprofit Organizations: Reasonableness, Comparability, and Disclosure*, 71 TULANE L. REV. 819 (1997); Benjamin Leff, *The Case Against For-Profit Charity*, 42 SETON HALL L. REV. 819, 868--76 (2012); Evelyn A. Lewis, *Charitable Waste: Consideration of a Waste Not, Want Not Tax*, 30 VA. TAX REV. 39 (2010). Of these, only Leff addresses agency costs at all, and his focus is on the extent to which paying managers with a share of firm profits would increase agency costs for donors, *id*. at 870. A few non-legal sources briefly connect managerial pay at nonprofits to possible agency costs, but do not analyze the situation in any depth. *E.g*., James A. Brickley & R. Lawrence van Horn, *Managerial Incentives in Nonprofit Organizations: Evidence from Hospitals*, 45 J. L. & ECON. 227, 228 n.4 (2002) (noting that high executive pay at nonprofits could be a sign of agency costs).

the nonprofit sphere, allowing managers to run organizations in ways donors or other stakeholders might not approve.[13] But while managers may make some choices donors would not, the dominant view is that nonprofit managers can largely be trusted not to over-pay themselves because they are committed to their cause, and because in any event monitoring by nonprofit boards and peers is effective at constraining any excessive compensation.[14] Perhaps as a result, no prior work, as far as we can tell, attempts to analyze nonprofit executive compensation through a managerial power framework. However, as we will explain, some earlier findings can be explained through that lens. [15]

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[13] *E.g.*, Henry B. Hansmann, *The Role of Nonprofit Enterprise*, 89 YALE L.J. 835, 838--51 (1980); M. Todd Henderson & Anup Malani, *Corporate Philanthropy and the Market for Altruism*, 109 COLUM. L. REV. 571, 598--600 (2009); Jill Horwitz, *Does Nonprofit Ownership Matter?*, 24 YALE J. ON REG. 139, 159 (2007); Robert A. Katz, *Can Principal-Agent Models Help Explain Charitable Gifts and Organizations*, 2000 WISC. L. REV. 1, 4--6; Geoffrey A. Manne, *Agency Costs and the Oversight of Charitable Organizations*, 1999 WISC. L. REV. 227, 230--36; Mark V. Pauly & Michael Redisch, *The Not-for-Profit Hospital as Physicians' Cooperative*, 63 AM. ECON. REV. 87 (1973); Usha Rodrigues, *Entity & Identity*, 60 EMORY L.J. 1257, 1267--71 (2011). For a review, see Marc Jegers, *"Corporate" Governance in Nonprofit Organizations*, 20 NONPROFIT MGMT. & LEADERSHIP 143, 145--59 (2009). Empirical evidence on this point includes Core, Guay, and Verdi, who find evidence that nonprofits' build-up of endowments may serve managerial interests, see John E. Core et al., *Agency Problems of Excess Endowment Holdings in Not-for-Profit Firms*, 41 J. ACCOUNTING & ECON. 307, 309 (2006), and Klick & Sitkoff, who find that markets appear to view charitable trusts as less reliable custodians of shareholder value than for-profit corporations, Jonathan Klick & Robert Sitkoff, *Agency Costs, Charitable Trusts, and Corporate Control: Evidence from Hershey's Kiss-Off*, 108 COLUM. L. REV. 749, 816 (2008).

[14] MARC JEGERS, MANAGERIAL ECONOMICS OF NON-PROFIT ORGANIZATIONS 46 (2008); Eugene F. Fama & Michael C. Jensen, *Separation of Ownership and Control*, 26 J. LAW & ECON. 301, 318--19 (1983) [hereinafter Fama & Jensen, Separation]; Eugene F. Fama & Michael C. Jensen, *Agency Problems and Residual Claims*, 26 J. LAW & ECON. 327, 344--45 (1983) [hereinafter Fama & Jensen, Agency Problems]; Bruce R. Kingma, *Public Good Theories of the Non-profit Sector: Weisbrod Revisited*, 82 VOLUNTAS 135, 142 (1997); Gregory O. Jobome, *Management Pay, Governance, and Performance: The Case of Large U.K. Nonprofits*, 22 FIN. ACCOUNTABILITY & MGMT. 331, 334 (2006); Stijn van Puyvelde et al., *The Governance of Nonprofit Organizations: Integrating Agency Theory with Stakeholder and Stewardship Theories*, 41 NONPROFIT & VOLUNTARY SECTOR Q. 431, 436 (2012) *see* Ralf Caers et al., *Principal-Agent Relationships on the Stewardship-Agency Axis*, 17 NONPROFIT MGMT. & LEADERSHIP 25, 28--31, 33--34 (2006) (explaining this theory and noting evidence that it seems to guide nonprofit boards); Myron J. Roomkin & Burton A. Weisbrod, *Managerial Compensation and Incentives in For-Profit and Nonprofit Hospitals: Is There a Difference?*, 15 J.L. ECON. & ORG. 750, 751--52 (1999) (suggesting that nonprofit firms use compensation structures to select managers who are not motivated by money and do not need close monitoring to prevent diversion of funds); Susan Rose-Ackerman, *Altruism, Nonprofits, and Economic Theory*, 34 J. ECON. LIT. 701, 716 (1996) (suggesting that ideological commitment helps to overcome agency problems in some nonprofits). *But cf.* George G. Triantis, *Organizations as Internal Capital Markets: The Legal Boundaries of Firms, Collateral, and Trusts in Commercial and Charitable Enterprises*, 117 HARV. L. REV. 1102, 1147--48 (2004) (noting that boards of complex nonprofits have many members, creating substantial opportunities for free riding). In the case of universities, Fama & Jensen argue that internal monitoring by other constituencies, such as faculty, and outside reviewers allow inexpert donors to effectively oversee presidents and other top management. Fama & Jensen, Separation, *supra*, at 321.

We are not aware of any significant evidence to support these claims. See *infra* part I.B.

[15] *E.g.*, Edward A. Dyl et al., *Governance and Funds Allocation in United States Medical Research Charities*, 16 FIN. ACCOUNTABILITY & MGMT. 335, 336 (2000) (reporting that presence of managers on board coincided with increased managerial pay); Raymond Fisman & R. Glenn Hubbard, *Precautionary Savings and the Governance of Nonprofit Organizations*, 89 J. PUB. ECON. 2231, 2240 (2005) (reporting that compensation in nonprofit sector is more highly correlated with donations in states where Attorney General has fewer oversight powers).

We think this neglect is unfortunate, for several reasons. For one, given the central roles played by emotion and ideology in the formation and support of charitable organizations, the nonprofit sector seems to be a promising laboratory for exploring the nuances of an *outrage*-focused managerial power theory.[16] As we'll argue, aspects of nonprofits provide an opportunity to test more directly for an outrage constraint, and evidence of the operation of an outrage constraint on executive pay in the nonprofit sector would bolster the theory more generally. In addition, we think that extending managerial-power insights to nonprofit organizations can potentially help to explain and shape nonprofit pay. Significant evidence of managerial power should motivate both stakeholders and regulators of nonprofits to give more attention to existing governance rules.

Accordingly, we theorize and then construct a test for managerial power in nonprofit executive pay-setting. Although we think adding this new theoretical approach to nonprofit analysis is itself useful, our primary contribution arises out of our analysis of the compensation of private college and university presidents from 1999 through 2007.[17] We investigate the "determinants" of president compensation, that is, which aspects of universities or their leaders are statistically correlated with greater or lesser pay.

As in the for-profit sector, we find, unsurprisingly, that executive compensation is a function of organization size and tenure in office.[18] But more importantly, we find evidence consistent with stakeholder outrage constraining executive pay. For example, we find that president pay is lower at religiously-affiliated institutions.[19] This result is consistent with the managerial power theory if one assumes, we think reasonably, that observer expectations regarding "acceptable" levels of president compensation would be lower at religiously affiliated institutions, although we acknowledge other more benign explanations could also fit our results.

In addition, we find that president pay is lower at institutions that are more highly dependent on current donations as a source of revenue (versus tuition, grants, etc.), which we interpret as a sign of managerial power.[20] The theory here is that active donors provide a source of potential outrage over pay that would be effective in dampening pay. Schools that are relatively insulated from this effect would be less constrained in setting compensation. Absent outrage constraints, one would expect university president compensation to *increase* when contributions rise, as more effective fundraisers are rewarded for their success. The fact that more powerful donors are able to drive down pay levels implies that presidents at schools with less-influential donors are extracting more pay than donors would want.

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[16] *See infra* Part II.
[17] *See infra* Part III.
[18] As one would expect, greater organization size and longer tenures are both positively associated with higher levels of president pay. *See infra* Part III.C.
[19] *See infra* text accompanying note 76.
[20] *See infra* Part III.C.

As a further check on our hypothesis, we analyze for the first time in the literature the impact of executive pay levels on future giving. In order for potential donor outrage to act as a disciplining force on pay levels, it must be the case that donors care about and, in aggregate, respond negatively to high president pay levels. We find a negative association between reported pay levels and future giving, which is consistent with the idea that donors dislike and respond to excessive pay.[21]

We think our findings suggest not only the importance of outrage but also the likelihood of managerial power. Returning to the observation that led off this introduction, it would be difficult to explain a 50% increase in university president pay levels between 1998 and 2007 as simply an increase in the cost of talent across this decade, particularly given the fact that public company executive pay levels were essentially flat over the same period. However, gross tuition dollars were up on average about 40% over this period, increasing access to funds that are insulated from donor outrage, and the process of benchmarking pay levels against the pay of presidents of peer institutions became ubiquitous at universities and other nonprofits around 2002. Under an agency cost view, this combination of factors would be consistent with an uptick in the upward trend of university president pay levels at about that time.[22]

The remainder of this Article is organized as follows. Part I provides background and a brief overview of the leading theories of the executive pay setting process. Part II extends the theory to nonprofit organizations and discusses the testable implications of our theory in the context of higher education. In Part III, we describe our data, present our analyses, and interpret the results. Part IV considers the implications of our analyses. Part V concludes. We also include a Methodological Appendix detailing the finer points of our empirical analysis.

I. Executive Pay in the For-Profit and Nonprofit Sectors

Although the analytical focus of this Article is on executive pay in the nonprofit sector, specifically in higher ed, the theoretical work on executive pay is dominated by work on public company executive pay. This Part, and the Part that follows, provide a brief overview of that literature and explain why the managerial power theory of the executive pay setting process is as plausibly applicable to the nonprofit sector as to the for-profit sector. This theoretical link is important for two reasons. First, it provides a sound basis for the analysis of college and university president pay that follows. Second, it paves the way for the claim made later in the Article that evidence of an outrage constraint operating in the nonprofit sector is evidence supporting the managerial power theory in the for-profit sector as well, which represents an additional payoff to our work.

[21] It is not obvious that donors would react negatively to high president pay levels. Some donors might view high pay levels as a signal of high quality that inspires confidence in giving. However, as described more thoroughly below, the evidence indicates a negative correlation between compensation and donations. *See infra* Part III.D.
[22] *See infra* Part III.F.

A. Public Company Executive Pay

There are two competing, but to some degree complementary theories of the executive pay setting process at U.S. public companies.[23] The optimal contracting theory, which dominates the corporate finance literature on executive pay, posits that executive pay is designed to minimize managerial agency costs that arise from the separation of ownership from control in the widely held, Berle/Means corporation.[24] As described by Jensen and Meckling, these agency costs reflect the divergence between share value maximizing actions of managers and managers' actual actions, plus the monitoring and bonding expenditures (including contracting costs) undertaken to reduce that divergence.[25] Under this view, equity compensation arrangements through which managers receive restricted stock, stock options, and the like, and long-term non-equity incentive plans are seen as minimizing agency costs and contributing to shareholder value by tying executive pay to long-term share price performance.[26]

One of the key insights of this literature is that corporate executives tend to be badly underdiversified, with excessive financial capital as well as their human capital tied up in their firms.[27] As a result, all else being equal, these executives would be more risk averse than their shareholders, who can easily diversify. Paying executives with restricted company stock[28] tends to aggravate the gap between managerial and shareholder risk preferences. However, because the value of stock options increases with share price volatility (i.e., risk), adding options to executive pay plans can bring executive risk preferences back into line with those of shareholders.[29] This is the optimal contracting explanation for the prevalence of option compensation.[30]

Proponents of the optimal contracting view do not insist that directors always bargain vigorously with executives over the terms of their compensation. Under this view, optimal

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[23] A third view is that corporate law issues are better explained as a team production problem rather than a traditional principal-agent problem. *See* Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247 (1999). Under the team production view, the board of directors serves as a mediating hierarch between stakeholders (executives, employees, creditors) who make firm-specific investments in the company. *Id*. at 276-87. This theory predicts that compensation arrangements would not be designed to maximize shareholder value, but to balance the interests of the stakeholders. *Id*. at 285-87.

[24] *See, e.g.*, Core et al, *supra* note 3, at 27.

[25] Jensen & Meckling, *supra* note 2, at 308-09.

[26] Core et al, *supra* note 3, at 29-33; Frydman & Jenter, *supra* note 3, at 88-89.

[27] Core et al, *supra* note 3, at 33.

[28] *Id*. Typically, compensatory stock becomes unrestricted or "vests" somewhere from 1 to 5 years following grant. If the executive's employment is terminated prior to vesting, the stock generally must be returned. *See* FREDERICK W. COOK & CO., THE 2009 TOP 250: LONG-TERM INCENTIVE GRANT PRACTICES FOR EXECUTIVES (2009).

[29] More generally, companies face a tradeoff in compensating executives. They want to provide high-powered incentives to encourage the executives to work hard and to take on appropriately risky projects, but compensation arrangements have to be mutually acceptable and non-diversified executives discount risky, high powered pay instruments. Thus, while option compensation may mitigate risk aversion concerns, it may be expensive to pay executives with options. Walker, *supra* note 3, at 247.

[30] There are other explanations. There is little doubt that accounting and tax rules have influenced the use and the design of option compensation. *See, e.g*., David I. Walker & Victor Fleischer, *Book/Tax Conformity and Equity Compensation*, 62 TAX L. REV. 399, 403-12 (2009).

arrangements could arise as a result of competitive pressures exerted by markets for capital, products, labor, or even corporate control.

Under the alternative managerial power view, executive pay arrangements are not simply a means of combatting agency costs; these arrangements also reflect agency costs.[31] The managerial power story begins with the observation that many features of executive compensation arrangements appear to be inconsistent with a share value maximizing model.[32] The managerial power view posits that executive pay practices do not uniformly reflect vigorous bargaining and that executives exert more influence over the terms of their pay than would be expected in an arm's length bargaining situation. Further, under this view, pressures from competitive markets for capital, products, labor, and corporate control are seen as insufficient to significantly constrain executive pay, which, even when outlandish, tends to represent a small fraction of costs for a large, public corporation.[33]

The threat or reality of investor and financial press outrage plays an important role in disciplining executive compensation under the managerial power view.[34] The idea is that executives and outside directors bear personal costs when these constituencies become outraged over pay levels or pay practices. In order to minimize outrage, executives and their boards seek out low salience channels of compensation and other means of camouflaging compensation. The result under the managerial power view is that public company executives receive both more pay and different forms of pay than they would in a well-functioning market, all of which is costly for shareholders.

Prior theory has not specified exactly the mechanism of action for the outrage constraint. One possible view is that outrage comprises a set of social sanctions on managers who extract excessive rents: The firm is a cooperative enterprise, and participants impose largely intangible punishment on those whom they know to be violating the implicit cooperative norm.[35] Or, more broadly, managers may face judgment from their friends and peers for violating social norms. A third possibility is that outrage represents latent action on the part of other stakeholders, action that could be motivated by emotion or ideology. The literature on collective action reports that emotional and ideological commitment often are key factors in groups that successfully

[31] Bebchuk et al., *supra* note 5, at 784.
[32] *Id*. at 795--834.
[33] *Id*. at 774--79.
[34] *Id*. at 786--88.
[35] *Cf.* ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 35-37, 88-89, 205-07 (1990) (describing use of norms in the informal governance of shared resources). We note that punishment may, but need not, be related to the efficacy of the manager's pay structure as a system for incentivizing maximum returns to stakeholders. Participants may also have preferences for the distribution of firm profits that do not align perfectly with the distributionally-neutral optimal incentive structure.

overcome free riding.[36] Managers would then aim to avoid "outrage" as a way of ensuring that their principals continue to monitor only loosely.

Evidence supporting the managerial power theory of the executive pay setting process in the public company setting is largely indirect. For example, we observe that executives and boards camouflage compensation by emphasizing relatively opaque pay channels such as deferred compensation[37] or backdated stock options,[38] and we infer that they do so to minimize outrage over pay levels. Some commentators have argued that insufficient pay for performance sensitivity[39] or a lack of relative performance evaluation[40] undermines the persuasiveness of the optimal contracting theory, but others remain unconvinced.[41]

The totality of the evidence does not support any single theoretical framework regarding executive compensation in the for-profit sector. It seems likely, in fact, that the optimal contracting and managerial power views co-exist, providing relatively more or less explanatory power at particular companies.

B. The Conventional View of Nonprofit Executive Pay in Theory and Practice

In contrast, commentators generally agree that excessive pay is not a serious concern in the nonprofit sector, and U.S. law largely reflects that consensus. A recent economics text on nonprofit governance quotes approvingly another author's observation that "boards should not necessarily invest in . . . mechanisms … to curb…CEO pay excesses."[42] Intellectual leaders in both compensation design and nonprofits, ranging from incentive-pay godfathers Fama and Jensen to Susan Rose-Ackerman and Burton Weisbrod, have made similar claims.[43]

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[36] *See, e.g.*, RUSSELL HARDIN, COLLECTIVE ACTION 108--12 (1982); Lise Vesterlund, *Why Do People Give?*, *in* THE NONPROFIT SECTOR: A RESEARCH HANDBOOK 568, 569—78 (Walter W. Powell & Richard Steinberg eds., 2d ed. 2006); David Knoke, *Incentives in Collective Action Organizations*, 53 AM. SOC. REV. 311, 326 (1988).

[37] Bebchuk & Jackson, *supra* note 7, at 831 (suggesting that opaque deferred compensation arrangements might be attractive as a means of reducing the salience of compensation, even if the arrangements are inefficient).

[38] David I. Walker, *Unpacking Backdating: Economic Analysis and Observations on the Stock Option Scandal*, 87 B.U. L. REV. 561, 603 (2007) ("It is hard to imagine more thoroughly camouflaged compensation than secretly backdated options whose value far exceeds that reported to shareholders.").

[39] Michael C. Jensen & Kevin J. Murphy, *Performance Pay and Top-Management Incentives*, 98 J. POL. ECON. 225, 227 (1990) (arguing that evidence of minimal pay for performance sensitivity in CEO contracts is "inconsistent with the implications of formal agency models of optimal contracting").

[40] Alfred Rappaport, *New Thinking on How to Link Executive Pay with Performance*, 77 HARV. BUS. REV. 91, 92--94 (1999) ("The huge gains from options for below-average performers should give pause to even the most ardent defender of current corporate pay systems."); *cf.* Bengt R. Holmström, *Moral Hazard in Teams*, 13 BELL J. ECON. 324, 334--38 (1982) (explaining the importance of relative performance evaluation in overcoming moral hazard in the corporate setting).

[41] Brian J. Hall & Jeffrey B. Liebman, *Are CEOs Really Paid Like Bureaucrats?,* 113 Q. J. ECON., 653, 653--56 (1998) (finding increased pay for performance sensitivity that undermines the view that CEOs are paid like bureaucrats); *see also* Brian J. Hall & Jeffrey B. Liebman, *The Taxation of Executive Compensation*, 14 TAX POL'Y & ECON. 7 (2000); George P. Baker & Brian J. Hall, *CEO Incentives and Firm Size*, 22 J. LABOR ECON. 767 (2004); Core et al, *supra* note 3.

[42] JEGERS, *supra* note 14, at 46 (quoting Jobome, *supra* note 14, at 350).

[43] See sources cited *supra* note 14.

These authors argue that self-selection, ideological alignment with donors, and "stewardship" constrain rent-seeking by managers at nonprofit organizations.[44] If managers know that cash compensation is typically lower at nonprofits, individuals who accept the job will be those who are less motivated by cash.[45] Instead, commentators argue, nonprofit managers are motivated primarily by a drive to help others, or otherwise to fulfill some ideological mission.[46] Taking cash from the organization would diminish its capacity to accomplish its goals, which the manager presumably shares.[47] And managers at nonprofits may be "stewards," that is, the kind of people who prefer to sacrifice (or at least be perceived as sacrificing) on behalf of others.[48]

Scholars recognize that nonprofits suffer from managerial agency problems that are similar to those observed in the for-profit sector, but they argue that fact supports their views on managerial pay. As in the case of public companies, large nonprofits are characterized by a separation of ownership from control.[49] The separation is even more severe, as nonprofits lack several control mechanisms, such as the pressure of shareholder voting or exit, that for-profits can employ.[50] As a result, managers have a great deal of freedom to run the organization as they please. If so, however, they may have less of an incentive to extract excess compensation from the organization; the money is essentially under their control either way.[51]

These theories, though popular, have not been subjected to much empirical testing. Jobome argues, on the basis of a survey of U.K. nonprofits, that he finds evidence in support of this hypothesis, though it would be more accurate as a statistical matter to say that he fails to find evidence rejecting it.[52] Other authors have claimed, based on findings that link presidential compensation to "quality" measures such as U.S. News Ranking, that "agency theory is working" --- that is, presidents are faithful agents of their principals.[53] But the fact that better managers are paid more does not rule out the possibility that all managers are paid too much. Similarly, findings that for-profit managers on average earn more than their nonprofit counter-

[44] See sources cited *supra* note14.
[45] Caers et al., *supra* note14, at 31; Femida Handy & Eliakim Katz, *The Wage Differential Between Nonprofit Institutions and Corporations: Getting More by Paying Less?*, 26 J. COMPARATIVE ECON. 246, 249--50 (1998).
[46] Susan Rose-Ackerman, *Ideals Versus Dollars: Donors, Charity Managers and Government Grants*, 95 J. POL. ECON. 810, 812 (1987).
[47] JEGERS, *supra* note14, at 45; *see* Rose-Ackerman, *supra* note14, at 719--20 (arguing that managers trade off cash pay for ability to achieve ideological goals).
[48] van Puyvelde et al., *supra* note14, at 436.
[49] Fama & Jensen, Separation, *supra* note 14, at 308--10, 319.
[50] *See* sources cited *supra* note 13.
[51] JEGERS, *supra* note 13, at 45; *see* Rose-Ackerman, *supra* note 13, at 719--20.
[52] Jobome, *supra* note 14, at 350--51. That is, he cannot distinguish the effect he measures from zero. But Jobome does nothing to rule out "Type II error" --- the fact that his methods did not unearth a relationship does not prove its absence.
[53] Thomas Li-Peng Tang et al., *Factors Related to University Presidents' Pay: An Examination of Private Colleges and Universities*, 39 HIGHER EDUC. 393, 411 (2000).

parts tell us only that nonprofit managers do value some aspect of their jobs, and not whether they also take opportunities to award themselves more cash when possible.[54]

Nonprofit governance in the real world mirrors academic views in taking a highly laissez-faire view of executive pay. State attorneys general have responsibility for nonprofit oversight, including oversight of executive compensation.[55] But AGs are subject to their own agency problems and resource constraints, and most AG offices have scant resources for the number of organizations nominally under their supervision.[56] Even if AGs were energetic and attentive, courts grant almost complete deference to board compensation decisions, unless those decisions are the result of blatant conflicts of interest.[57]

Another possible limitation is built into the federal tax code. Under IRC § 501(c)(3), "no part of the net earnings" of a tax-exempt charitable organization may "inure[] to the benefit of any private shareholder or individual."[58] Thus, while the law permits paying a public company executive a portion of firm earnings as an incentive, such an arrangement is largely off-limits in the nonprofit sector.[59] Private inurement rules also prohibit managers from taking home compensation in excess of fair market value, since that might represent a disguised form of profit distribution.[60]

Of course, nonprofit executives must be paid a competitive wage. The difficulty lies in distinguishing between competitive compensation, which is allowed, and "excess benefit transactions" that represent forbidden private inurement. Since 2002, this line has largely been policed by the "intermediate sanctions" rules of the tax code.[61] Under these rules, significant financial penalties can be imposed on nonprofit executives and directors who engage in "excess benefit transactions," which include the provision of excessive executive pay.[62]

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[54] See JEGERS, *supra* note 14, at 43--44, for a review.

[55] MARION FREMONT-SMITH, GOVERNING NON-PROFIT ORGANIZATIONS: FEDERAL AND STATE LAW AND REGULATION 54 (2004).

[56] Manne, *supra* note 13, at 250--51; s*ee* Frumkin & Clark, *supra* note 12, at 441--47 (setting out reasons for limited efficacy of AG oversight of pay); Mark Sidel, *The Nonprofit Sector and the New State Activism*, 100 MICH. L. REV. 1312, 1334--35 (2002) (reviewing NORMAN I. SILBER, A CORPORATE FORM OF FREEDOM: THE EMERGENCE OF THE NONPROFIT SECTOR (2001)).

[57] FREMONT-SMITH, *supra* note 55, at 209--10.

[58] However, firms are allowed to provide some limited incentives to executives, as long as the incentive is not the equivalent of a share of profits. James R. Hines, Jr. et al., *The Attack on Nonprofit Status: A Charitable Assessment*, 108 MICH. L. REV. 1179, 1193--96 (2010).

[59] GCM 39674 (Jul 29, 1992) (holding that profit-sharing arrangements for physicians at nonprofit hospitals were not per se illegal but would be scrutinized closely by the IRS).

[60] Frumkin & Clark, *supra* note 12, at 467.

[61] IRC § 4958; Treas. Reg. § 53.4958-1. These sanctions are described as "intermediate" in the sense that they are less draconian than revoking a nonprofit organization's tax-exempt status. For a thorough overview of the intermediate sanctions regime, see Carly B. Eisenberg & Kevin Outterson, *Agents Without Principals: Regulating the Duty of Loyalty for Nonprofit Corporations Through the Intermediate Sanctions Tax Regulations*, 5 J. BUS. L. & ENTREP. 243, 251--70 (2012).

[62] Treas. Reg. § 53.4958-1, -4(b)(1)(ii).

While the intermediate sanctions rules strongly encourage nonprofits to follow certain procedures in setting executive pay, they are unlikely to provide significant discipline on the substance of these awards.[63] The rules offer a safe harbor for nearly all compensation packages awarded by well-advised boards. The rules include a rebuttable presumption that transactions, including awards of pay, are not excess benefit transactions if 1) they are approved in advance by a nonprofit board or committee composed of individuals who have no conflict of interest, 2) the board or committee obtained and relied on appropriate data in determining pay, and 3) the board or committee adequately documented the basis for its decision.[64] If these criteria are met, the burden shifts to the IRS to show that a pay grant was an excess benefit transaction.[65] Organizations can defend their award by pointing to pay in similar for-profit industries, and first-time contracts are exempt from any excess-benefit scrutiny at all.[66]

Nonetheless, the ban on private inurement, which Henry Hansmann termed the "non-distribution constraint,"[67] may constrain executive pay for two reasons. First, the rule may create a norm in favor of restrained compensation in the nonprofit sector. Second, the rule bars the use of certain compensation tools that might result in high compensation. One of the explanations for the dramatic increase in public company executive pay in the 1990s was the shift into stock option compensation that coincided with a decade long boom in the stock market.[68] Analysts continue to debate whether the relationship was a causal one,[69] but the point is that a similar circumstance could not arise in the nonprofit world given the IRC § 501(c)(3) prohibition against private inurement.

II. Towards a Theory of Managerial Power in the Nonprofit Sector

In our view these accounts of nonprofit executive compensation are too optimistic. In this part we'll argue that, while money may not be the *only* thing that matters to nonprofit managers, it still is an important piece of their total rewards. Further, drawing on insights from the existing managerial power literature, we will argue that stakeholder outrage is likely to constrain nonprofit executive pay in such a way as to explain variations in compensation between seemingly similar organizations. This literature also suggests ways in which our hypothesis could be tested empirically. Finally, in Part II.C., we discuss these general points in the specific context of colleges and universities.

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[63] Jill S. Manny, *Nonprofit Payments to Insiders and Outsiders: Is the Sky the Limit?*, 76 FORDHAM L. REV. 735, 736 (2007).
[64] *Id*. § 53.4958-6(a).
[65] *Id*. § 53.4958-6(b).
[66] *Id*. § 53.4958-4(a)(3), (b)(1)(ii).
[67] Hansmann, *supra* note 13, at 838.
[68] Frydman & Jenter, *supra* note 4, at 76.
[69] See Walker, *supra* note 4, at 235--36, for a review.

A. What Matters to Nonprofit Managers?

While nonprofit managers may highly value mission, ideology, or prestige, powerful empirical evidence suggests that they also value money. With rare exceptions, executives even of the noblest charities do not work for free. Many organizations pay cash bonuses, and several studies find some evidence of "pay for performance" in the nonprofit sector---managers who do a good job are paid more.[70] These data points, too, imply that managers are motivated by money (or at least that the boards who set their pay think they are).

The question, then, is not whether managers would like to be paid more, but rather what higher pay would cost them. As we just noted, some commentators argue that a manager might prefer to leave funds in the organization, since she controls those funds and uses them to achieve her personal goals.[71] We think this is unlikely at nonprofits of any meaningful size. The marginal contribution of a dollar to the organization's outputs will be very small relative to its contribution to the manager's utility. That is, a million dollars is not going to move a university from Beach Bum State to Elite U, but that same million would dramatically transform the life of a president previously earning $100,000 per year. Further, the quality of the organization's output is a public good shared among the stakeholders; if the manager is a rational self-maximizer, she should typically prefer to free ride on the contributions of others.[72]

Higher compensation may also cost the manager some reward from "warm glow." Presumably, managers are willing to give up some cash, despite the factors we just identified, because they derive some offsetting value, or "warm glow," from the act of donation.[73] As we noted, part of the manager's satisfaction from doing her job may be the approval of peers or others. Game theory and evolutionary biology, among other disciplines, offer explanations for why humans might admire and reward our self-sacrificing colleagues.[74] Managers who value these rewards might lose some of them if they are observed to draw a large paycheck.[75] Of course, lower pay is not necessarily the only answer; high pay that is opaque to outside eyes is another.

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[70] *See* Hines, Jr. et al., *supra* note 58, at 1194--98 .
[71] See sources cited *supra* note 47.
[72] In some public goods settings, free ridership is lower because one or a few contributors can make disproportionately large contributions (leaving them with little free riding opportunity, and other contributors with a large value for a small contribution), *see* Rose-Ackerman, *supra* note 13, at 713, but this would not be the case for one employee in a large firm.
[73] *See* Fama & Jensen, Agency Costs, *supra* note 14, at 344; see Laura Leete, *Work in the Nonprofit Sector*, *in* THE NON-PROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 159, 159--65, for a review and Brian Galle, *Keep Charity Charitable*, 88 TEX. L. REV. 1213, 1223 (2010) for more extended discussion.
[74] *See, e.g.*, Ernst Fehr & Urs Fischbacher, *The Nature of Human Altruism*, 425 NATURE 785, 785--91 (2003); David G. Rand et al., *Direct Reciprocity with Costly Punishment: Generous Tit-for-Tat Prevails*, 256 J. THEORETICAL BIOL. 45, 45--57 (2009).
[75] *See* Rose-Ackerman, *supra* note 13, at 714 (noting donors may lose value of giving if others perceive their actions as overly self-serving).

Lastly, cash is tax-disfavored relative to warm glow or other rewards of leaving money in the organization. Employees are taxed on cash or in-kind compensation, but generally not on psychic benefits.[76] At a for-profit firm, reducing cash pay in favor of psychic benefits is tax-favored for the employee, but tax-disfavored for the employer, which loses out on its deduction for the costs of compensation.[77] Nonprofit employers are usually tax exempt, and so exchanging cash for psychic benefits would be wholly tax favorable.

If managers had complete control over their compensation structure, their pay would represent a pure balancing among these factors.[78] Assuming a diminishing marginal value of cash, diminishing returns to making a charitable contribution, and a decreasing marginal tax benefit to warm glow compensation (since the employee's marginal tax rate on cash declines when she substitutes warm glow for cash), we should expect managers optimally to select a mix of cash and other rewards. Few managers will starve or live under a bridge in order to earn warm glow, but those that value warm glow will take some degree of pay cut to earn it.

The pay structures preferred by organizations may not match the manager's, giving rise to incentives for managerial opportunism. To take the simplest example, the organization may have some bargaining power and may offer the manager a total award of combined cash and glow that is less than her optimal level. Since she can't easily extract additional warm glow from the organization, her only alternative is take opportunities to award herself more cash.

Similarly, other stakeholders may have preferences for a different *mix* of compensation. Outside donors, too, may be motivated by warm glow.[79] Donors' glow could depend on the manager's pay: Will outsiders perceive the donor as noble if her money goes to pay for the president's private jet? Assuming the pay package the organization offers reflects donor preferences to some degree, the manager will again have incentives to move closer to her personal optimum by extracting additional cash from the organization.

In sum, even managers who are strongly motivated by their nonprofit mission also have need for, and often incentive to acquire, additional cash. So they have motive, what about means and opportunity?

B. What Constrains the Compensation of Nonprofit Managers?

A modest reading of the standard literature on nonprofit executive pay would be that pay is lower in this sector because of manager self-selection and the warm glow enjoyed by

[76] WILLIAM A. KLEIN ET AL, FEDERAL INCOME TAXATION 68 (14th ed. 2006).

[77] Absent an explicit expenditure, simply providing a warm glow to an employee would not generate a deduction for an ordinary and necessary business expense. IRC § 162(a).

[78] See Handy & Katz, *supra* note 45, at 258--59, and Ann Preston, *The Nonprofit Worker in a For-Profit World*, 7 J. LABOR ECON. 438, 442 (1989) for formal models of how firms and managers choose between mixes of pure cash vs. cash plus fringe benefits and amenities.

[79] Lise Vesterlund, *Why Do People Give?*, *in* THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 568, 572; James Andreoni, *Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving,* 100 ECON. J. 464, 464-65 (1990).

managers and other stakeholders. We do not dispute such a modest claim, but we argue that monetary compensation matters as well, that monetary compensation is significant, and that managerial agency theory, specifically, the managerial power theory, can help explain the variation in cash compensation and benefits received by managers of various nonprofits.

We would argue that many of the factors that lead to managerial power in the for-profit setting apply as strongly, if not more so, in nonprofits. As in public companies, boards of directors or trustees are charged with negotiating nonprofit executive pay.[80] These boards are likely to be relatively weak and the executives relatively strong with respect to the pay setting process, and other matters, for the same reasons that public company boards are weak and executives strong. First, nonprofit trustees are part-timers who typically spend a small fraction of their time exercising oversight over the organization, while the full time executives set the agenda and control the flow of information to the trustees.[81] Second, the trustees are not spending their own money when they negotiate executive pay. In fact, while public company directors are increasingly compensated with equity,[82] which may encourage them to think and act more like owners, nonprofit trustees can have no direct economic interest in their organizations.[83] Third, as in the case of public company directors, nonprofit trustees are likely to be bound to the senior executives through various formal and informal ties that encourage a culture of deference to the executives.[84] Other stakeholders rarely have both incentives and resources to closely monitor executive pay.[85]

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[80] ROBERT J. DESIDERIO, PLANNING TAX-EXEMPT ORGANIZATIONS §2A.02 (Rel. 10 2011).

[81] James J. Fishman, *Standards of Conduct for Directors of Nonprofit Corporations*, 7 PACE L. REV. 389, 397 (1987); *cf.* Bebchuk et al., *supra* note 5, at 772 (describing impact of similar dynamic at for-profit firms).

[82] Frydman & Jenter, *supra* note 4, at 76.

[83] Hansmann, *supra* note 13, at 838. Nonprofit firms may but usually do not offer directors simple salary or other non-proprietary compensation. *See* Maureen Glabman, *The Future of Voluntary Governance*, HOSP. & HEALTH NETWORKS, Sept. 2006, at 68 (noting scarcity of compensated board members in nonprofit sector).

[84] *See* Brian G. M. Main, Charles A. O'Reilly III, & James Wade, *The CEO, the Board of Directors, and Executive Compensation: Economic and Psychological Perspectives*, 11 INDUS. & CORP. CHANGE 293 (1995) (for-profits); Avner Ben-Ner & T. Van Hoomissen, *The Governance of Nonprofit Organizations: Law and Public Policy*, 4 NONPROFIT MGMT. & LEADERSHIP 393, 404--05 (1994) (nonprofits); Danne L. Johnson, *Seeking Meaningful Nonprofit Reform in a Post Sarbanes-Oxley World*, 54 ST. LOUIS UNIV. L.J. 187, 203--04 ("It is not unusual for the incestuous director relationship, common in the for-profit sector, to be replicated on nonprofit boards…."). These close relationships may also affect the psychological and cognitive pathways that lead to effective governance. Melanie Leslie, *The Wisdom of Crowds? Groupthink and Nonprofit Governance*, 62 FLA. L. REV. 1179, 1189--1210 (2010).

Although the intermediate sanctions rules discussed above essentially require that nonprofit directors that approve executive pay not have a conflict of interest, that standard insures only a very modest degree of independence. Efforts to increase outside director independence in the for-profit sector, such as by removing inside directors from board nominating committees, generally have not carried over to the nonprofit sector. IRS regulations do reward board independence in certain situations, using independence as a plus factor in the determination of public charity status (*see* Treas. Reg. § 1.509(a)), but for many nonprofits, such as the institutions of higher education that are the focus of this study, public charity status is automatic (*see* IRC § 509(a)(1)) and thus this lever is unimportant.

[85] Frumkin & Clark, *supra* note 12, at 461--62, 482.

In fact, the separation is more severe in the nonprofit sector. At public companies, it is generally possible for a party to accumulate a sufficient number of shares to gain control, and this possibility places some upper bound on agency costs.[86] In the nonprofit sector, there is no market for organizational control, and no such upper bound. [87] Further, the absence of a market for organizational control reduces board and managerial incentives to achieve maximal cost effectiveness.[88] This can be a benefit, since charity is rarely just about the bottom line. But it does mean that pressure to reduce compensation and other costs is rather lower.

Though these traditional mechanisms are weak, we would argue that the threat or reality of what Bebchuk, Fried, and Walker term "outrage" could play an important role in disciplining the pay of nonprofit executives. Like their for-profit counterparts, nonprofit managers and board members may experience personal costs if others believe that the manager receives excessive compensation. By definition nonprofit organizations do not share a cooperative venture with investors, but they do have donors, beneficiaries or customers, and employees.

Nonprofit managers and trustees are also likely to be particularly sensitive to more general social perception of their pay. Again, to the extent that "warm glow" is an important component of the manager's compensation, she pays a price for disappointing the public.

Lastly, nonprofit managers may be constrained by latent stakeholder responses to higher reported pay. Warm glow is an important motive for donors.[89] If donors' attachment to the nonprofit is diminished by emotional or ideological disappointment in its leader's pay, donations may fall, leaving the manager with fewer resources available to pursue her own goals.[90] As a result, nonprofit boards are rightly concerned "that raising [executive] salaries could tarnish a group's public image."[91]

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[86] Jensen & Meckling, *supra* note 2; Henry G. Manne, *Bring Back the Hostile Takeover*, WALL ST. J., June 26, 2002.

[87] Fama & Jensen, Separation, *supra* note 14, at 319; Rodrigues, *supra* note 13, at 1268--69. Potentially, if large donors tend to be granted seats on the board of directors, there may be something like a slow-motion market for corporate control, in that outsiders can potentially purchase the ability to direct the firm. Eleanor Brown & Al Slivinski, *Nonprofit Organizations and the Market*, *in* THE NON-PROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 140, 154. But there is no opportunity for a hostile takeover; an existing board can simply refuse to seat new board members who would diminish their control.

[88] Rose-Ackerman, *supra* note 13, at 712.

[89] See sources cited *supra* note 79.

[90] *Cf.* Rose-Ackerman, *supra* note 14, at 714, 719 (noting that if donors' emotional rewards from giving decline so do gifts, and that managers' signal of ideological commitment may be important to donors). The role of the press in this story is unclear. The press may serve simply as an intermediary – the means by which information is passed to the stakeholders who express approbation or disapprobation – or the press may contribute more directly to an outrage constraint if managers are sensitive to adverse press coverage independent of its impact on donors, employees, and other stakeholders.

[91] Sharon M. Oster, *Executive Compensation in the Nonprofit Sector*, 8 NONPROFIT MGMT. & LEADERSHIP 207, 219 (1998) (quoting nonprofit compensation consultant, Leonard Pfeifer); *see* Dennis R. Young, *Executive Leadership in Nonprofit Organizations*, *in* THE NONPROFIT SECTOR --A RESEARCH HANDBOOK, *supra* note 36, at 167--79 (stating that donors expect nonprofit managers to partially volunteer their efforts).

Anecdotal evidence supports the notion that nonprofit executives and boards are sensitive to the perception of their pay practices.[92] Like their for-profit brethren, nonprofit executives often receive a considerable portion of their total compensation in less visible forms, such as deferred compensation and perquisites.[93] Moreover, some nonprofit executives receive only a portion of their compensation directly from their employer with the balance coming from an outside foundation.[94] Aside from camouflaging total compensation, it is difficult to imagine what purpose is served by splitting compensation in this way.[95]

Our claims about the importance of outrage as a constraint on nonprofit pay lead us to a testable hypothesis. Nonprofit organizations subject to greater actual or potential "outrage" should pay less, all else equal. In the next two sections, we describe how institutional differences are likely to lead to differences in the outrage constraint. In Part III, we will test whether these differences do indeed result in differences in pay.

C. Outrage Constraints and the Example of Colleges and Universities

The nonprofit sector seems a promising place to search for variation in outrage constraints. As noted above, evidence from the for-profit sector of the managerial power theory and the impact of an outrage constraint is largely inferential – we see that executives and boards camouflage compensation and deduce that they do so to minimize outrage – but there are few, if any, differences between firms in a particular subsector (say manufacturing or utilities) that would have a predictable and testable impact on the outrage constraint and thus pay levels at various firms. By contrast, there are several factors at play in nonprofits (and absent or of less significance in the for-profit sector) that should have a differential impact on the outrage constraint from organization to organization and that may provide more compelling evidence of the existence and scope of that constraint.

Several commentators have observed that the public expects leaders of charitable organizations to be paid less than their for-profit peers.[96] Referring to the comments section of its webpage, Charity Navigator notes that "many donors assume that charity leaders work for

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[92] Kertz, *supra* note 12, at 820.

[93] ROBERT H. ATWELL & JANE V. WELLMAN, PRESIDENTIAL COMPENSATION IN HIGHER EDUCATION: POLICIES AND BEST PRACTICES (2000); Kertz, *supra* note 12, at 865--66; Wendy K. Szymanski, *An Allegory of Good (and Bad) Governance: Applying the Sarbanes-Oxley Act to Nonprofit Organizations*, 2003 UTAH L. REV. 1303, 1323--24 (noting loans with favorable terms are common in nonprofit compensation).

[94] Julianne Basinger & Sarah Henderson, *Hidden Costs of High Public Pay*, CHRONICLE OF HIGHER EDUC., Nov. 14, 2003; Ronald G. Ehrenberg et al., *Paying Our Presidents: What Do Trustees Value?*, 25 REV. HIGHER EDUC. 15, 17 (2001); *see* Charity Navigator, 2012 CEO Compensation Study 16 (Nov. 2012), *available at* http://www.charitynavigator.org/__asset__/studies/2012_CEO_Compensation_Study_Final.pdf (noting that some firms in the study pay executive through use of multiple affiliate organizations).

[95] Some state institutions reportedly rely on compensation from multiple sources to avoid state-law caps on public employee salaries. Basinger & Henderson, *supra* note 70. But there is no comparable explanation for the practice among private entities.

It also is possible that executives are concealing pay from employees as well as or rather than donors. Wage equity reportedly is important to worker motivation in the nonprofit sector. Leete, *supra* note 73, at 164.

[96] R. Herzlinger, *Effective Oversight: A Guide for Nonprofit Donors*, HARV. BUS. REV., July 1994, at 52.

free or minimal pay and are shocked to see that they earn six figure salaries."[97] It is not clear, however, that the public considers private colleges and universities to be in the same category as more innately charitable organizations, such as churches and relief agencies, even though all of these organizations are lumped together as "public charities" under the tax code.

In particular, outrage might depend on the nature of the nonprofit's mission. Observers likely expect greater self-sacrifice from employees at organizations with clear-cut spiritual or public service missions, such as churches and relief organizations; nonprofits with large revenues and many paying customers may look more "commercial" and therefore carry an expectation of something like market salaries.[98] Alternately, Usha Rodrigues argues that because customers of service-providing nonprofits can draw on their own direct observations and the reports of peers, the need for and expectation of "signals" of charitable status are less important for those entities.[99] Unfortunately, it is not feasible to test for the impact of an outrage constraint across nonprofit subsectors. It is not practical to separate the impact of the outrage constraint from other factors that would differentially impact pay levels across subsectors (e.g., higher levels of pay for nonprofit hospital executives resulting from higher pay levels enjoyed by for-profit hospital executives).

Thus, while we suspect that the managerial power view and the outrage constraint help to explain the pay setting process at U.S. nonprofits generally, the focus in this Article is on the compensation of the leaders in one particular nonprofit subsector – private colleges and universities. We choose higher education because it comprises a large portion of the nonprofit sector, because the variation in mission among different institutions provides a version of the ideal study outlined in the last paragraph, and because of the ready availability of relevant data.

We focus on *private* colleges and universities for two reasons. First, as discussed below, we have managed to collect a wealth of data on the compensation of private college and university presidents, donations, and various important control variables. Second, and more importantly, the agency problem at public and private universities is different. While both private and public university heads typically report to a board of trustees, in the private university sphere, the chain of command ends there. Private university boards are self-replicating and/or include members elected by alumni.[100] Either way, there is a great deal of independence. Many public university trustees are selected by state governors and other political actors.[101] Moreover, public universities are often organized into a state system. The head of the

[97] Charity Navigator, *supra* note 94, at 1.
[98] Hansmann, *supra* note 13, at 876; *see* Daniel Shaviro, *Assessing the "Contract Failure" Explanation for Nonprofit Organizations and Their Tax-Exempt Status*, 41 N.Y.L. SCH. L. REV. 1001, 1003--04 (1997) (suggesting that warm glow motive is more likely in non-commercial firms). This is not to suggest that outrage would play no role in the pay-setting process at nonprofit hospitals, only that the effect would be similar to that observed in the for-profit world where warm glow is totally absent.
[99] Rodrigues, *supra* note 13, at 1293--1303.
[100] James O. Freedman, *Presidents and Trustees*, *in* GOVERNING ACADEMIA 9, 13 (Ronald G. Ehrenberg ed., 2005).
[101] Donald E. Heller, *State Governance of Academia*, *in* GOVERNING ACADEMIA, *supra* note 100, at 49, 53.

state system, rather than the president of a particular university, may be the most senior executive within the system. In some cases, the publicly-funded compensation of public university presidents is capped under state law.[102] Even where pay is not formally capped, it may be limited by the realities of state budgeting processes. At bottom, a public university president is a government official, not an autonomous head of an independent institution.[103]

In a 2007 study, James Monks found that public university presidents earned about 50% less than their counterparts at comparable private universities.[104] Monks suggested that the difference might be explained by different skill sets required in the two jobs. Public university presidents need to be skilled at managing state appropriation processes, while private university presidents need to be expert at attracting private donations. Another explanation, however, would be that the agency problem is more severe in the non-governmental nonprofit sector, at least to the extent of university president pay. State law, appropriations processes, or university system administration may be more effective at restraining compensation of particular university presidents than an independent board of trustees.

D. Testable Implications of the Outrage Constraint at Private Colleges and Universities

What then are the possible sources of outrage variation across colleges and universities? We see four primary sets of differences, which will form the focus of the empirical analysis that follows.

1. Religious Affiliation

Although religious affiliation may have little or no impact on the scope or demands of an executive's job, consistent with the previous discussion, observers may feel that the head of a college with a religious affiliation should be paid at a relatively low level. They may feel that the charitable nature of the organization should extend to its senior management. At one level, we would simply expect a more strongly negative visceral reaction to the announcement that the president of a religiously affiliated college received $1 million in pay than we would to the same announcement with respect to the president of an otherwise identical secular college. At a

[102] *See, e.g.*, FLA. STAT., Title 48, ch. 1012.975(2) ("a state university president may not receive more than $225,000 in remuneration annually from public funds"). The Florida legislature has not restricted university president salary funding from other sources. *Id.* at 1012.975(3) ("section does not prohibit any party from providing cash or cash-equivalent compensation from funds that are not public funds").

[103] For evidence on the role of politics in setting public university budgets, see Robert C. Lowry, *The Effects of State Political Interests and Campus Outputs on Public University Revenues*, 20 ECON. OF EDUC. REV. 105, 117--18 (2001); see also Ronald G. Ehrenberg, *Econometric Studies of Higher Education*, 121 J. ECONOMETRICS 19, 28--29 (2004), for a brief review of other studies.

[104] James Monks, *Public Versus Private University President Pay Levels and Structure*, 26 ECON. OF EDUC. REV. 338, 345 (2007). Because total compensation was inconsistently reported, Monks analyzed university president salaries rather than total compensation. *Id.* at 341. It is conceivable that some of the gap in salary was offset by other benefits. However, Monks found that presidents tended to move from public to private institutions and not in the reverse direction, *id.* at 342, 347--48, which suggests that the total package of benefits (pay, benefits, prestige, etc) was greater in the private university sphere.

deeper level, the theory here is that donors to "commercial" nonprofits are more likely to simply be customers purchasing a product, while donors to organizations with a clearer ideological mission will derive a greater measure of utility from the "warm glow" of giving.[105] Customers purchasing a product may view high pay simply as a signal of quality. In contrast, high pay can diminish the warm glow of giving by contradicting donors' distributive or other ideological preferences, and by undermining the social consensus that the organization is "noble" or "worthy"; if insiders won't sacrifice on behalf of the organization, that could be taken as a signal that less-informed supporters shouldn't, either.[106]

In sum, we would expect the outrage constraint to be set at a relatively lower level and to result in relatively lower executive pay at organizations with a religious affiliation. To be sure, though, there would be competing explanations, such as self-selection, for a finding of a negative association between religious affiliation and pay levels.[107]

2. Exposure to Current Donations

Private colleges and universities receive funds from operations, government grants, donations, and other sources; and relative dependence on these sources varies.[108] Again, we expect that because donors are more motivated by "warm glow," they are generally more sensitive to perceived excess executive pay than are other revenue providers, such as customers (students and parents) or grant-making agencies.[109] At least under our first and third theories of "outrage," differences in schools' sources of funding should differentially impact compensation. If outrage consists of social sanctions from other stakeholders, or represents the threat of more tangible latent stakeholder action, executives of schools (and their boards) that are relatively more exposed to potential outrage on the part of current donors because current donations make

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[105] *See* Rodrigues, *supra* note 13, at 1295 (noting that religious hospitals may rely more on charitable signaling because it could provide them additional benefits not available to secular competitors). See Andreoni, *supra* note 65, at 494--98, for a general discussion of warm glow motives in giving.

[106] *See* GERALD MARWELL & PAMELA OLIVER, THE CRITICAL MASS IN COLLECTIVE ACTION: A MICRO-SOCIAL THEORY 7--9 (1993) (introducing authors' claim that organizations overcome free rider problems through mutual signaling of commitment, among other factors).

[107] For examination of the possibility that different pay structures in the nonprofit sector attract employees with different sets of motivations, see Anne E. Preston, *Women in the White-Collar Nonprofit Sector: The Best Option or the Only Option?*, 72 REV. ECON. & STATS. 560, 564 (1990). For more general discussion of the importance of workplace amenities in sorting workers into different jobs, including in the religious employer context, see Jonah Gelbach et al., *Passive Discrimination: When Does it Make Sense to Pay Too Little?*, 76 U. CHI. L. REV. 797, 800--22 (2009).

[108] If nonprofit line employees substitute "warm glow" for salary, as others have suggested, see Henderson & Malani, *supra* note 13, at 583--84, they are in effect donors to the firm and should be sensitive to executive pay in the same way.

[109] *See* Caers et al., *supra* note 44, at 39--40 (noting that donor outrage could constrain executive pay). Hansmann, *supra* note 13, at 843--68, suggests that all purchasers of services from a firm whose product is difficult to monitor would be suspicious of managerial rent extraction. Our argument, though, is that some customers are only purchasing goods or services, while others are also purchasing warm glow. *See* Shaviro, *supra* note 98, at 1003--04 (suggesting that warm glow story is important for only some of the firms whose outputs are difficult to verify). Hansmann himself notes that hospitals likely do not fit into his framework, and are nonprofit for "historical" and tax-related reasons. Hansmann, *supra* note 13, at 866--67.

up a relatively large portion of revenues may feel more constrained in providing high levels of executive pay. Our second suggested mechanism, more general social disapprobation, could also be at play if executives' and trustees' social circles tend to give more recognition to leaders of organizations with greater donor support. Thus, we would expect that all else being equal, college and university president pay levels decline with the fraction of revenues that consists of current donations.[110]

This is a particularly interesting prediction because, absent outrage, one would expect university president compensation to *increase* with increasing contributions as more effective fundraisers are rewarded for their success. While the predicted association between religious affiliation and pay could be explained by other mechanisms, it is more difficult to come up with plausible alternative explanations for why compensation would decrease with fund-raising success. As discussed below, several possible alternative explanations seem quite unlikely.

3. Unionization

Other factors may be present in both the for-profit and nonprofit sectors but may have a differing impact on the outrage constraint in the two sectors. For example, we would expect unionized employees to be more effective critics of high college or university president pay than non-unionized, generally less well-organized employees.[111] Moreover, unionized employees may provide a more effective voice at nonprofit organizations, than at for-profit companies, because nonprofit managers will have greater difficulty in assigning responsibility for pay levels to market forces. If so, the disciplining effect of unionization may be more discernible in the nonprofit sector.

4. Institution-Specific Factors

Although the factors discussed above lead us to think that private colleges and universities should provide a fertile laboratory for the study of managerial power and the outrage constraint, other features of the sector may make it more difficult for us to find strong evidence. In some cases, institution specific factors, such as particularly active press coverage, may swamp the impact of donors, unionization, or religious affiliation. All else equal, trustees who anticipate widespread coverage of their pay decisions are likely to feel more constrained in awarding compensation than trustees who expect that their decision will fly under the radar. Also, while university president pay has grown substantially in recent years, the growth and diversity in pay

[110] Again, however, the story may be more complicated. As Hansmann describes, consumers may view the nonprofit form as indicating commitment not to divert profits to private actors. Hansmann, *supra* note 13, at 845. Excessive compensation might undermine that perception and affect product sales by a nonprofit. Thus, to the extent that a nonprofit provides goods or services, we might expect that nonprofit executive pay levels would also decline with the fraction of revenues consisting of sales.

[111] On the general role of employees as potential checks on managerial rent-seeking, see Caers et al., *supra* note 44, at 40--41, and Fama & Jensen, Separation, *supra* note 13, at 321. We find some correlation between the president pay and mean faculty compensation, *see infra* Table A.2., which could support a theory that employees help to constrain managerial pay at close to their own compensation levels. But the correlation could also be due to cross-school differences in prestige, wealth, and local cost of living and amenities.

does not match that of the for-profit sector. Part of the explanation may lie in a difference in technology. Without equity compensation, it is unlikely that public company executive pay would have grown to present levels. This is not to suggest that there is inadequate variation to study university president pay, but only that the signal to noise ratio may be somewhat lower in this sector.

III. Private College and University President Pay: Data and Analysis

In this Part, we examine about a decade's worth of data on the compensation of university presidents, donations to schools, other sources of revenue, expenditures, measures of quality, and a variety of other variables that could affect compensation. We find evidence consistent with the idea that an outrage constraint plays a role in determining university president pay. We also find evidence supporting our hypothesis that donors respond to high executive pay levels by reducing their contributions. This latter finding adds additional support to our theory that donors represent an important source of potential outrage that serves to constrain nonprofit executive pay. Although all of this evidence is consistent with the theory discussed in Part II, the evidence we provide, as is typical with work of this sort, does not enable us to make bold statements about causation.[112]

A. Sources of Data

We explore the compensation of presidents of private colleges and universities with a sample comprised of the 341 colleges and universities that appear both in the Chronicle of Higher Education (CHE) "Private Universities" report and the National Center for Education Statistics (NCES) data for each of the nine years between 1999 and 2007.[113] The CHE report compiles salary and other compensation data by drawing on tax return information filed by each school. NCES is a division of the U.S. Department of Education that has as its mission the

[112] The problem, in a word, is "endogeneity." Endogeneity is a statistician's term for the possibility that the direction of causation assumed by the statistical model is incorrect; technically, it describes any situation in which the measured variable is correlated with the estimated errors. WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 11 (6th ed. 2008). This may be the result of the dependent variable—the outcome that is being predicted—in fact causing the factors we are using to analyze it. An example would be trying to predict why the sun rises, and concluding that it is caused in part by roosters crowing; there is a strong correlation, but our researcher has the causation story backwards. Another form of endogeneity can result from omitting a variable from the model that jointly causes both the dependent variable and the explanatory variable. An example could be a researcher observing a correlation between SAT scores and salary and concluding that employers pay high-scorers more; in fact, both are likely related to underlying intelligence or social capital.

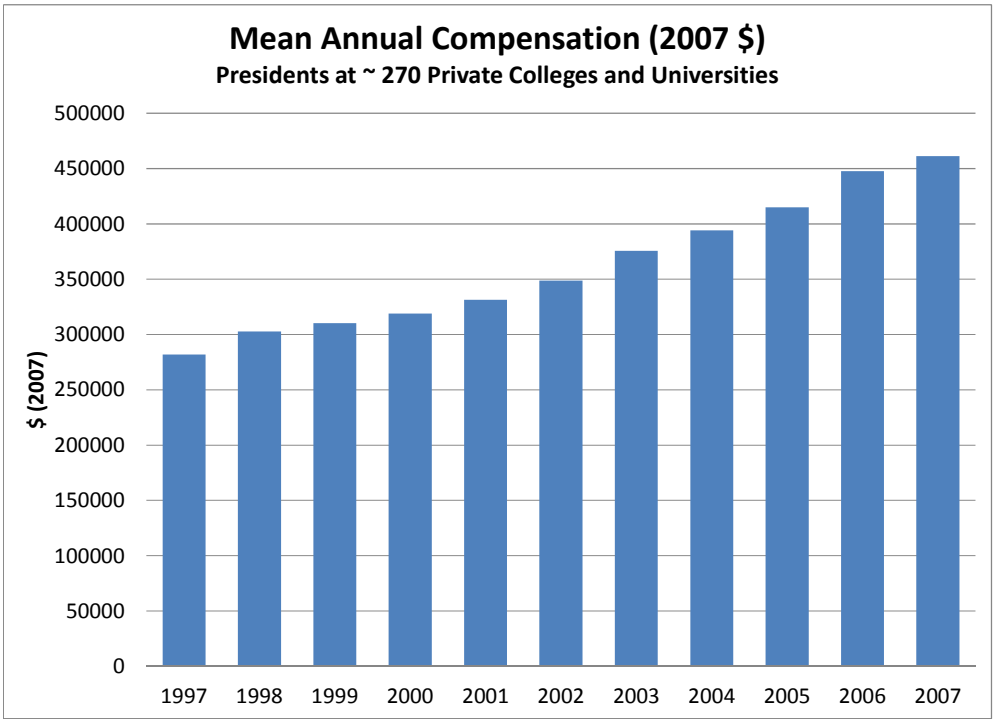
[113] Although our study focuses on the period 1999 to 2007, we use lagged data for some variables.

Our data derive from three main sources. President salaries and other compensation come from the annual compilation by the Chronicle of Higher Education (CHE). CHE's figures in turn were harvested from Form 990 tax returns filed by the respective organizations. Most other institution-level data, including religious affiliation, were downloaded from the National Center on Education Statistics (NCES). NCES derives its data from regulatory filings required by the U.S. Department of Education. We obtained each school's fundraising costs, as well as other data used in our instrumental-variable regressions, by matching NCES data with corresponding university tax return information from the National Center on Charitable Statistics. In addition, we hand-collected unionization and U.S. News ranking information for each school, as well as some demographic data on presidents, such as each individual's tenure in office. We deflated all dollar amounts to real values using the CPI.

collection and public distribution of information about institutions of higher education.[114] For interested readers, we set out summary details and additional details about the construction of our data set in a Methodological Appendix.

Average total reported compensation of the presidents in our sample was $365,000 in 2007 dollars---that is, after adjusting for inflation. This average, however, masks a significant upward trend in pay levels across the period as portrayed in Figure 1.[115]

***Figure* 1**



B. Existing Evidence on College and University President Pay

Before launching into our own analyses, it is worth briefly reviewing previous work on private college and university president pay. Prior studies have established that the compensation of university presidents bears a fair relationship to the demands of the job and the personal characteristics of the president. Studies of the nonprofit sector generally find a relationship between the size of an organization and the pay of its management.[116] Several

[114] National Center for Education Statistics, About Us, http://nces.ed.gov/about/

[115] College and university presidents receiving no reported compensation are excluded from the data presented in Figure 1.

[116] Core et al., *supra* note 13, at 325--26; Hallock, *supra* note 12, at 392--96; Charity Navigator, *supra* note 94, at 6; see also Jegers, *supra* note 15, at 151--53, for more discussion of this connection.

studies of universities in particular similarly find that the size, complexity, and wealth of an organization predict its president's pay.[117] A number of others find that president pay is influenced by factors that could be described as measures of success, such as selectivity, rankings, and peer assessments, though others authors find no evidence of "pay for performance."[118] More experienced managers do earn more in studies that examine that question, though.[119]

Evidence on the questions we explore here is scant. The most similar prior effort is Oster, who found no significant impact of a university's ability to spend out of endowment on presidents' pay.[120] Oster's results are difficult to rely on, however, because she studied only a small number of universities, looked at only one year, and did not control for most of the other factors affecting president pay we just noted.[121] However, Oster did find some relation between dependence on donations and compensation in a slightly larger group of ninety-five nonprofits (only a handful of them educational organizations), albeit again with very limited institutional or personal-characteristic controls.[122]

Two earlier papers look for, and claim to find evidence inconsistent with, managerial power among nonprofits. We have already discussed the efforts by Jobome, who studied a broad range of nonprofits in the U.K.[123] In the university setting, Langbert and Fox report that the 20% of the presidents in their sample who were hired from within the university were paid less than their externally hired counterparts.[124] They argue that this evidence is inconsistent with the managerial power hypothesis because internal hires "ought to have institution-specific human capital" and "more extensive ties to the Boards of Trustees" ---that is, greater managerial power---but instead they earn less.[125]

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[117] Bartlett & Sorokina, *supra* note 116, at 59--64; Ying Sophie Huang & Carl R. Chen, *Are College Chief Executives Paid Like Corporate CEOs or Bureaucrats?*, 45 APPLIED ECON. 3035, 3036 (2013); Tang et al., *supra* note 15, at 411; Kim Boulanger & Jeffrey Pliskin, Determinants of Compensation of College Presidents (unpublished manuscript, 1999).

[118] Those finding evidence of a positive correlation include Bartlett & Sorokina, *supra* note 116, at 59--64; Huang & Chen, *supra* note 117, at 3036; Monks, *supra* note 101, at 344--47; Olga V. Sorokina, *Executive Compensation: The Case of Liberal Arts College Presidents*, 12 ISSUES IN POL. ECON., at [7--8] (2003); Tang et al., *supra* note 15, at 411; and Rajiv D. Banker et al., The Compensation of University Presidents: A Principal-Agent Theory and Empirical Evidence (unpublished manuscript July 2009), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1444849. Those finding no link include Ehrenberg et al., *supra* note 94, at 26, and Peter Frumkin & Elizabeth Keating, T*he Price of Doing Good: Executive Compensation in Nonprofit Organizations*, Hauser Center for Nonprofit Organizations Working Paper No. 8 (2001), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=292253.

[119] Bartlett & Sorokina, *supra* note 116, at 59--64; Huang & Chen, *supra* note 117, at 3036.

[120] Oster, *supra* note 91, at 214.

[121] *Id*.

[122] *Id*. at 211.

[123] *See supra* text accompanying notes 52--54.

[124] Mitchell Langbert & Marc Fox, The Compensation and Benefits of Private University Presidents, manuscript at 13--14 (unpublished manuscript, Sept. 2011), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2089641.

[125] *Id*.

We are unpersuaded by Langbert and Fox. Managerial power theorists in the for-profit context point out that outside hires often have greater negotiating leverage and must be paid a premium to leave their already-excellent job, which explains why they will often earn more than inside candidates.[126] Moreover, we would not expect internal hires, who are usually university provosts or other lower ranking university officials, to have much managerial power because they do not have nearly the same ability to shape the board or the opportunities to interact with it as presidents. In addition, employees signing their first contract with a charitable organization are exempt from IRS rules limiting excessive compensation, supplying a potential tax reason for outside hires to be paid more.[127] Finally, we suspect that the Langbert & Fox results may be driven in part by the fact that interim presidents would typically be internal hires and would be paid less than permanent hires.

A few other studies also supply some relevant data. Ehrenberg and his co-authors find some evidence that successful fundraising increases a president's compensation.[128] Two studies examine the relationship between the percent of alumni donating and pay, reaching somewhat contradictory results: one finds a negative relationship, which is generally consistent with our finding, while the other finds no effect.[129]

C. Determinants of President Pay

Like these earlier studies, we employ regression analysis techniques that allow us to investigate the impact of various factors on pay, holding other factors constant. The dependent variable in our analyses is total reported compensation. We measure the importance of stakeholder outrage for president compensation through three main explanatory variables – the proportion of the university's annual budget derived from contributions and gifts, institutional religious affiliation, and faculty or staff unionization – and we control for the determinants of pay found to be important in these earlier studies, including various measures of the size of the institution, institutional quality, and tenure in office. Our sample, again, is a panel of 341 schools taken over a nine-year period, which allows us to explore variation over time as well as variation from school to school.

The analysis presents several empirical challenges. To begin, methods of computing non-salary compensation vary between organizations, and, for reasons that we discuss below, it

[126] Michael C. Dorff, *Does One Hand Wash the Other? Testing the Managerial Power and Optimal Contracting Theories of Executive Compensation*, 30 J. CORP. L. 255, 270 (2005). *But see* Murphy, *supra* note 10, at 854 (arguing that higher pay for outside hires is inconsistent with managerial power hypothesis).
[127] Treas. Reg. 53.4958-4.
[128] Ehrenberg et al., *supra* note 94, at 29--30; Hallock, *supra* note 12, at 398.
[129] *Compare* Sorokina, *supra* note 118, at [7--8] (no relation), *with* Langbert & Fox, *supra* note 124, at 16 (weak negative relationship).

is unlikely that the variation is random. Thus, our results are best interpreted as measuring the determinants of reported, rather than actual, compensation.[130]

Second, one of our primary variables of interest – the fraction of revenue from donations – may be related to president pay in more than one way. As explained above, dependence on gifts captures to some degree donors' leverage over the organization and its managers, and therefore should be negatively correlated with the organization's preferences for higher pay.[131] This negative association is suggested by theory, and previous studies provide some support for it.[132] However, as prior literature also reports, boards tend to reward successful fundraisers.[133] This positive correlation between pay and donations may obscure the negative correlation the outrage theory predicts. Given the two competing forces, one would expect the relationship between donor dependence and pay to be non-linear. Over some ranges of compensation, the outrage effect would dominate producing a negative association; over other ranges the fundraising effect would dominate producing a positive correlation.

We test for this non-linear relationship by creating a series of non-linear fit plots -- basically, graphs in which our computer was allowed but not required to draw a curve rather than a straight-line relationship. And, indeed, as exemplified by the "u-shaped" curve in Figure 2, the combination of the two effects results in the expected nonlinear relationship. Accordingly, we include the square of the fraction of revenue from donations in our regressions to capture the nonlinear effect.

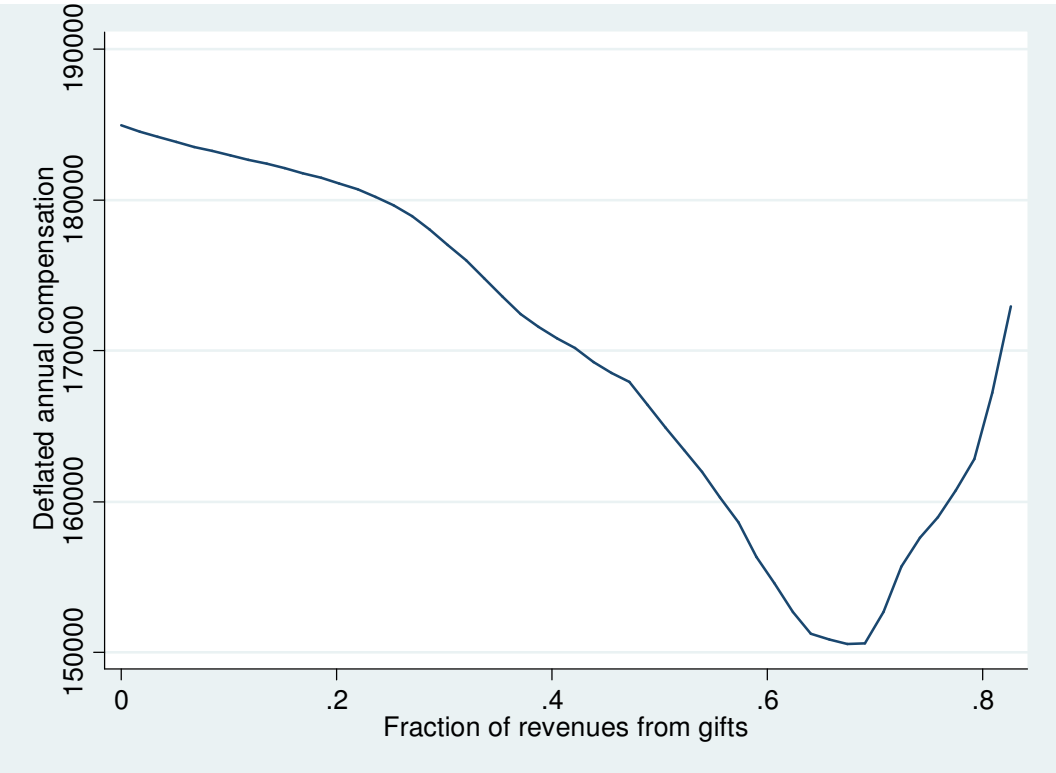
Figure 2: Real Annual Compensation vs. Fraction of Revenue from Gifts

[130] We obtain qualitatively similar results when we use presidential salaries rather than total reported compensation as the dependent variable in our analyses.

[131] We obtain quantitatively similar results when using alternative measures of the university's dependence on gifts, such as gifts as a percentage of expenditures or gifts per student.

[132] Oster, *supra* note 91, at 214; Langbert & Fox, *supra* note 124, at 16.

[133] Ehrenberg et al., *supra* note 94, at 29--30; Hallock, *supra* note 12, at 398.



Endogeneity may present an additional challenge. Unobserved aspects of presidential ability, such as strong leadership and fundraising skills, could simultaneously drive both giving and presidential pay. Outside shocks to regional wealth or inflation could also drive both giving and pay. Our primary solution to these problems, as further described in the appendix, is to employ president "fixed effects" that should control for unobservable variation in presidential ability and human capital. Similarly, we employ state and year fixed effects to help account for the effects of local economic factors. In any event, all of these relationships would tend to produce a positive relationship between pay and donations. To the extent that we find a negative relationship, it should be in spite of, rather than because of, these unobserved influences. We also employ a variety of other econometric techniques for overcoming endogeneity to double-check the "robustness" of our result. These, too, are described in more detail in the appendix.

Table 1 summarizes our basic "ordinary least squares," or "OLS" regression results; a more complete version of the table, including results for various control variables, can be found in the appendix.

Table 1: Effects of Donation-Dependence on Compensation

Variable	Coefficient
% gift	**-287,283.30**

	(97,641.16)**
% gift squared	**549,525.79**
	(195,669.68)**
Relig. affil.	**-43,180.33**
	(10,356.59)***
Staff union	-11,526.80
	(19,107.65)
Tuition	**0.00070**
	(0.00022)**
Grants	-0.000050
	(0.000081)

Notes: *: significant at 5% level in a 2-sided test against the null; **: significant at 1% level ***: significant at .1% level; coefficient reported with (standard error); random-effects OLS regressions with state and year effects; errors clustered by president; all regressors lagged one year.

Overall, we find some support for our hypotheses. We find two strong, opposing effects of increasing dependence on donations on presidential pay. The linear effect is negative, statistically significant, and economically substantial in magnitude. For example, the coefficient in our base "ordinary least squares" regression implies that a one-standard deviation increase in the fraction of revenue from gifts, which is about a 19% bump, would correspond to $54,583 (in 1983 dollars) less reported compensation as a result of the linear effect, or about $111,426 less in 2007 dollars. For comparison, the median total compensation in the sample is $370,325 in 2007 dollars. At the same time, greater donations also lead to higher pay; the nonlinear effect was positive in sign, and statistically significant. As expected, we find no evidence that grants or tuition constrain reported presidential pay. Indeed, the sign of the coefficient on tuition is positive and significant. Several possible explanations for this finding are discussed below.

Turning to the other measures of outrage, we find significant constraints only from religious affiliation. Our data confirm earlier results[134] finding that religiously-affiliated presidents receive lower average compensation --- almost $88,000 less (in 2007 dollars) in our sample. President pay was lower at schools where staff is unionized, but this relationship is not statistically significant.

We did find significant results with the expected sign for a number of our institutional and personal-characteristic controls. Schools with more resources pay more, and presidents earn more the longer they are in office. President and faculty salaries tend to move in the same

[134] Oster, *supra* note 91, at 212, 214 (reporting lower pay at religious organizations generally, but finding no significant results for religious universities); Kent T. Saunders, *Salary Study of College Presidents and Faculty: Are Salaries for Institutions in the Council of Christian Colleges and Universities Different From Other Private Institutions?*, 2 CHRISTIAN BUS. ACAD. REV. 83, 85--88 (2007) (finding that presidents of religiously-affiliated colleges earned about $25,000 less than their peers during the 2005 academic year, and that presidents at a small group of self-identified Christian fundamentalist schools earned another $22,000 less).

direction, though no doubt some portion of that correlation is due to simultaneous shocks to the academic labor market.

D. The Impact of President Pay on Contributions

In order for donor dependence to constrain presidential pay in the manner we have hypothesized, it must be the case that donors care about presidential pay levels and respond, in aggregate, negatively to high compensation. In other words, donor sensitivity is a necessary but not sufficient condition for the proposition that dependence on current donations dampens pay levels. We test donor sensitivity to compensation through an analysis of the determinants of annual giving. Our prediction is that higher pay levels will be associated with reduced levels of contributions.

It is not obvious that the aggregate donor response to high compensation would be to withhold or moderate contributions. Some donors may be indifferent to president compensation. Other donors may view high executive pay levels as a signal of quality that justifies their support. But still other donors may view high compensation levels as waste, a signal of poor governance, or an indication that the institution is already flush with funds. Only in these latter cases would one expect a negative association between pay and donation levels, and the existence of such an association would depend on the latter effect outweighing any positive association between pay and donations. Based on anecdotal evidence and analogous evidence from the public company sector,[135] we expect a negative association between pay and donations to dominate, but that assumption must be tested.

As before, we construct a panel derived from Chronicle of Higher Education compensation data and institutional variables from the National Center for Education Statistics and the National Center for Charitable Statistics. Our dependent variable is simply total annual giving. Since donors must first learn of compensation before they react to it, and the main source of compensation information is annual tax return data filed up to fifteen months after the beginning of the academic year, we expect to see any impact on giving only at some remove from the actual year of payment. Thus, our main variables of interest are lagged measures of reported compensation--- i.e., measures from previous years.[136]

Relying on lagged data also mitigates endogeneity concerns. Our earlier results suggest both that higher pay can reduce giving and also that successful fundraising can increase pay.

[135] Although the view is not unanimous, there is evidence in the public company realm that shareholders take a dim view of high executive pay. Marinilka Barros Kimbro & Danielle Xu, Should Shareholders Have a Say on Executive Compensation? Evidence from Say on Pay in the United States, (unpublished manuscript, April 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2209936, find that negative "say on pay" votes are associated with high levels of executive pay. Jie Cai & Ralph A. Walkling, *Shareholders' Say on Pay: Does it Create Value*, 46 J. FIN. & QUANTITATIVE ANAL. 299 (2011), find that the unexpectedly overwhelming House passage of mandatory "say on pay" shareholder voting in 2007 resulted in a positive market reaction at firms with high abnormal CEO pay levels, suggesting that the discipline created by say on pay was welcome.

[136] Our results using only salary, or using the difference between compensation and mean president compensation, as the main variables of interest are essentially identical.

But, of course, compensation in 2000 cannot be a reward for successful fundraising in 2002. Admittedly, though, both high compensation and generous contributions may be the products of some third variable we cannot measure, such as the charm, gregariousness, social connections, or talent of the president. Once more, we control for these possibilities by using president fixed effects. If this approach does not fully eliminate the role of unobserved human capital, then the regression coefficients on reported compensation will be biased upwards---in other words, we expect that the hidden factors will tend to produce a positive correlation between pay and donations. Since we predict a negative correlation between pay and donations, the effect of these personal characteristics will therefore tend to obscure our hypothesized result.

Our basic results are presented in Table 2. Once more, we report controls and robustness checks in the Appendix.

Table 2: Determinants of Annual Contributions

Variable	Coefficient
Lags of comp.	**-30.55**
(total 1st & 2d)	**(12.27)***
Non-Donative Revenues	**0.062**
	(0.0012)***
Years in office	43,424.91
	(157,480.11)

Notes: *: significant at 5% level in a 2-sided test against the null; **: significant at 1% level ***: significant at .1% level; coefficient reported with (standard error); random-effects OLS regressions with state and year effects; errors clustered by president.

In general, we find an economically substantial and statistically significant negative relationship between reported compensation and donations in each of our analyses. For example, the result of our base "ordinary least squares" regression suggests that an additional aggregate dollar of president compensation over the prior two years is associated with $30 less in donations. Perhaps surprisingly, we find no evidence that longer-tenured presidents are more successful at bringing in funds. This finding is consistent with our suggestion above that president fixed effects largely capture the impact of presidential human capital.

The bottom line here, however, is clear. Donors respond to high president pay by reducing contributions. As a result, it is certainly plausible that at schools where donations contribute relatively more to overall revenues, presidents and trustees would have a stronger incentive to hold down reported compensation.

E. Interpreting the Empirical Results

As suggested above, our results are probably best understood as providing evidence regarding the determinants and effects of reported, rather than actual, compensation. To be sure, the fact that our compensation data are drawn from federal tax returns, and therefore that willful misstatements are punishable with jail time,[137] adds to our confidence in the accuracy of the numbers. But prior to 2009, when the IRS revised its guidelines for reporting non-cash compensation, there were few established conventions for how organizations should account for the present-year value of deferred or in-kind payments.[138] CHE's data for the 2009 academic year evince a larger fraction of payment in the form of benefits than we observe in our sample.[139] In light of the empirical evidence of concealed pay in the for-profit context, it is reasonable to assume that universities generally reported lower annual compensation where that was possible within the existing rules.[140]

Our hypothesis further suggests that the degree of under-reporting was likely not random. Arguably, concealment works to reduce outrage because the average stakeholder rationally free-rides on the efforts of others in acquiring compensation information. When there is agency slack, boards of directors can therefore respond to outrage constraints either through reductions in real pay or reductions in reported pay. To avoid tax-fraud prosecution, the board can camouflage pay by shifting cash compensation into other forms where reporting rules are looser. For example, the former president of one top research university was, according to its 2010 tax return, still collecting over $100,000 per year for his past services, even while not retired and still earning a separate salary for serving on its faculty.[141] That expected cost was not clearly reported during his time in office.[142]

Econometrically, the possibility that camouflage substitutes for real reductions means that our results are not fully reliable as evidence of the economic importance of compensation per se. If greater donor pressure creates increased incentives to camouflage, we cannot tell whether the results we observe reflect changes in real pay, changes in reporting practices, or some combination.

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[137] 26 USC § 7206.

[138] *See* Kertz, *supra* note 12, at 865--66 (noting wide inconsistencies in compensation reporting by charities); Julie Niklin, *Colleges Are Evasive About Presidents' Benefits Packages*, CHRONICLE OF HIGHER EDUC., Nov. 24, 2000.

[139] Benefits represented 22.7% of total compensation in CHE's academic-year 2009 data, while comprising between 13.4 and 17.4% of compensation over the period of our sample.

[140] *See, e.g.,* Bebchuk et al., *supra* note 5, at 795-834 (providing examples of public company pay practices consistent with the managerial power view); Bebchuk & Jackson, *supra* note 7, at 832--51 (public company pensions); Walker, *supra* note 38 (stock option backdating); *see also* Ehrenberg et al., *supra* note 94, at 30 (reporting that universities may use deferred compensation because it is "less visible").

[141] President and Fellows of Harvard College, IRS Form 990 FY2010, *available at* http://www.guidestar.org/FinDocuments/2011/530/199/2011-530199180-085e1806-9.pdf.

[142] Harvard's tax return for 2006 did disclose that its then-departing President would be paid "miscellaneous" expenses, loan benefits, and a future award totaling "less than one year's salary at the time of resignation." President and Fellows of Harvard College, IRS Form 990 FY2006, page 17, *available at* http://nccsdataweb.urban.org/orgs/profile/042103580?popup=1#forms. The return also notes that the value of the President's free housing is not included in the reported compensation figure. *Id.*

However, from a policy perspective, outrage-induced shifts in pay design and reported compensation may be as important as reductions in "real" compensation. As Bebchuk, Fried, and Walker argue in the public company context, compensation arrangements designed with camouflage in mind may fail to provide desirable incentives and may even provide perverse incentives.[143] Whether donor pressure constrains actual compensation, or instead only distorts the form in which pay is presented, we have provided evidence that pressure from donor outrage changes agents' behavior. Likewise, the fact that reported compensation impacts donors' willingness to support the university is significant for policy and for university planning, even if donors are not responding to fully accurate information.

1. Reliance on Current Donations

With that significant caveat in mind, we attribute our finding of a negative association between president pay and the fraction of university revenue derived from current donations as evidence consistent with the idea that the prospect of donor outrage would have a moderating influence on pay. We buttress this argument with evidence that donors care about and respond to president pay levels.

We find alternative possible explanations for our results less persuasive.[144] As noted above, Langbert and Fox found a negative association between the percent of alumni who donate and president pay, and one would expect these two metrics – dependence on current donations and rate of alumni giving – to be correlated.[145] Langbert and Fox labeled this result counterintuitive, but offered two explanations. They suggested it was "plausible" that the alumni giving rate would be a proxy for a teaching orientation and that presidents of teaching-oriented schools would be paid at a lower rate.[146] We control for this possibility using grants, Carnegie category (a descriptor for the entity's primary mission, such as "research university" or "liberal-arts college") and U.S. News ranking, and still find a negative influence of donation-dependence on pay. Second, Langbert and Fox suggested that the alumni giving rate might reflect the level of alumni involvement in governance, "which may … moderate administrators' salaries."[147] We agree. This latter view is consistent with the outrage hypothesis.

It has been suggested to us that unobserved negative shocks to a university's fortunes, such as a major scandal, might provide an explanation for the negative correlation we observe between pay and the fraction of revenue coming from current donations. The theory would be

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[143] Bebchuk et al., *supra* note 5, at 756-57; see also Emmanuel Saez et al., *The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review*, 50 J. ECON. LITERATURE 3, 6--18 (2010), for an argument in the tax context that what appear to be second-order behavioral effects can have important efficiency consequences.

[144] Jobome suggests that organizations that are more dependent on donations may adopt more conservative pay practices since donation levels may be volatile and these organizations would wish to avoid high fixed compensation costs. Jobome, *supra*, at 347. We doubt that this phenomenon would have much explanatory power in the university setting, where tuition revenues provide a relatively stable revenue stream.

[145] Langbert & Fox, *supra* note 124, at 16.

[146] *Id*.

[147] *Id*.

that universities are forced to pay a premium to a "fixer" president who will enter after a scandal and that the scandal would also depress donations. This possibility seems unlikely to explain our results. Major scandals are not common,[148] and tests for the influence of outliers showed little impact, suggesting that our results are not caused by a few instances of scandal. This theory would also predict that, if the scandal effect is big enough to drive our regression results, then first-year presidents should on average receive a pay premium, but we find instead that mean compensation increases with tenure in office.

We also interpret our results to support the presence not only of donor outrage but also significant agency costs. We observe that donors with greater leverage are apparently better able to hold down presidential pay. This implies that donors with less leverage are paying more than they would prefer.

A slightly different interpretation may be that presidents find it especially easy to draw on endowment earnings and tuition to pay themselves. Schools with large endowment earnings and tuition revenue will tend to have a lower dependence on donations, and so these two factors may help to explain the correlations we find. Because of weak monitoring by students and parents, tuition dollars are a less-constraining source of funds than many others. Or, similarly, both tuition and high president pay may be the result of high agency costs for the university's principals. Admittedly, a third story could be that tuition is or is perceived to be a measure of institutional quality or consumer demand. For example, we do find a modest correlation between gross tuition (i.e., not net of financial aid) and membership in upper-echelon U.S. news rankings in our sample.

Our findings on the relation between tuition and compensation therefore lend some additional support to our agency-cost story. Again, we find a fairly sizable, statistically significant correlation between tuition and president pay. A one-deviation increase in tuition correlates with a compensation increase of roughly $94,000 in 2007 dollars. That relationship is not simply a measure of available resources, since we also control for total revenues and enrollment. We therefore believe the most likely explanations are various forms of free riding.

The relation between endowment and earnings is less clear. Consistent with prior research, we find a strong correlation between endowment and compensation.[149] But we cannot easily distinguish between an agency-cost story and one in which boards simply reward managers who take on the challenge of managing billions of dollars in assets.[150]

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[148] Marion R. Fremont-Smith & Andras Kosaras, *Wrongdoing by Officers and Directors of Charities: A Survey of Press Reports 1995--2002*, 42 EXEMPT ORG. TAX REV. 25 (2003).

[149] *See, e.g.*, Core et al., *supra* note 13, at 309.

[150] *See* Robin L. Bartlett & Olga Sorokina, *Determinants of Presidential Pay at National Liberal Arts Institutions*, 29 REV. HIGHER EDUC. 53, 54, 57 (2005) (arguing that leaders of wealthier schools face greater complexity and risk of poor endowment performance). Core et al. argue that a "higher compensation for greater challenges" story cannot explain their result, because they include a measure of how efficiently the firm spends its money on program-related activities. Core et al., *supra* note 13, at 328. But that does not measure the President's success at managing

2. Religious Affiliation

Consistent with the work of others, we show that presidents of institutions with a religious affiliation tend to be paid less than presidents of completely secular schools. We argue that one explanation for this effect, consistent with the managerial power theory, is that observer thresholds for what constitutes outrageous compensation would be lower in the case of religiously affiliated institutions. But our data do not allow us conclusively to test or reject other plausible explanations for the association we observe, and it does seem likely to us that self-selection and substitution of "warm glow" for cash compensation would also contribute to this association. One test we do perform is to include the combined effects of religious affiliation and years in office in our regression. When we do that, we see that the initial discount for religiously-affiliated pay is about half that in our other regressions, and that the increment for time in office is also smaller. This may somewhat favor the outrage constraint hypothesis, in that it seems as though religious affiliation holds down pay in part by reducing its rate of increase, rather than simply by matching managers with lower demand for cash to institutions that pay less.

F. An Agency Cost Explanation for the Time Trend Data

Time-series analysis of presidential pay also supports our agency cost story. As shown in Figure 1, average university president pay climbed steadily and significantly between 1997 and 2007. It is difficult to imagine why the value of individuals willing to serve as presidents would have increased by 50% over this period. In fact, the compensation of public company CEOs – participating in one alternative labor market – was relatively flat over this period and the risk of being fired from a public company CEO position increased, reducing (somewhat) the attractiveness of these positions.[151]

So what does explain the upward trend in university president pay during this decade? We cannot be certain and offer only suggestive statistical evidence, but the trend is consistent with an agency cost explanation.

We note first that average tuition dollars, both gross and net, increased by about 40% over the period that average pay increased by about 50%. We suggested above that the positive association between tuition and pay might reflect the fact that tuition dollars carry lower levels of monitoring and can more easily be channeled into compensation.

Second, the final Intermediate Sanctions regulations were issued by the IRS in January, 2002. In order to create the rebuttable presumption that pay is reasonable under these

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the firm's investment portfolio or the risk premium she might demand for doing so. Another potential difficulty with the Core et al. results is that they assume the highest-compensated individual reported on the firm's tax return is the CEO, but in many universities that individual is actually the football coach or endowment manager. Obviously there would be a strong correlation between the salary of the endowment manager and the size of the endowment.

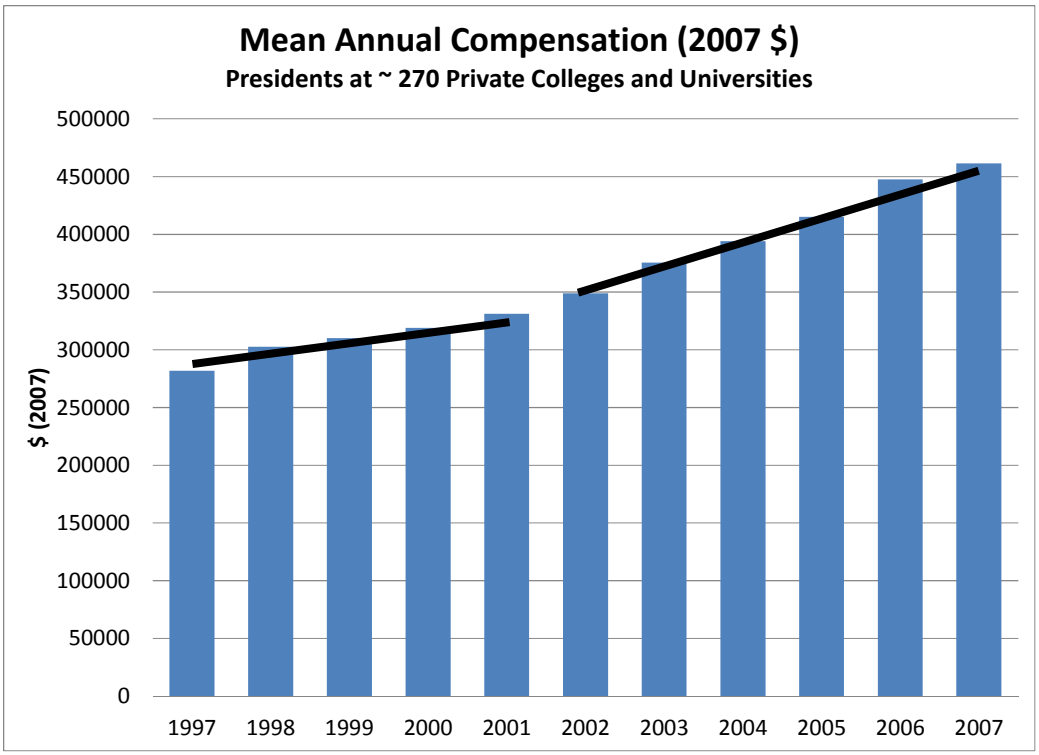
[151] *See* Huang & Chen, *supra* note 117, at 3036 (noting that public firm pay grew at 2% annually while university president compensation grew by 8% annually in real terms between 1997 and 2004 in their sample).

regulations, boards must show that they obtained and relied on appropriate data in determining pay.[152] The process through which organizations collect and analyze pay data at peer institutions is known as benchmarking.[153] It is widely suspected that the advent of benchmarking led to an upward spiral in pay levels at public companies.[154] The use of benchmarking to justify executive raises and option grants mitigated outrage. Outrage was reduced when these pay packages were placed in the context of pay packages received by peer executives and some of the responsibility for pay levels could be shifted to compensation consultants who designed the plans and opined on comparability.[155] Moreover, as no board wants to admit that its CEO is below average, boards typically target pay levels at between the 50th and 75th percentile of peer compensation.[156] As a result, pay levels tend to ratchet upwards.

It is plausible that, given increased "free cash flow" in the form of increased tuition dollars, increased use of benchmarking sparked by the implementation of the Intermediate Sanctions regulations contributed to greater year-on-year increases in mean pay.[157] Look again at the graph presented in Figure 1 and reproduced here. Note that the slope of a line fitted to the top of these bars tilts upwards around 2002. The benchmarking hypothesis is supported by a regression analysis that includes peer university presidential salary information and a "dummy" variable for years after 2001. These two variables are interacted and the interaction term is positively associated with president pay, suggesting that the compensation of peer presidents was a more important factor in determining pay after the advent of the Intermediate Sanctions regulations than before. To be sure, there are other possible explanations for the uptick in pay levels post-2001, and we do not argue that this analysis provides definitive evidence of the mechanism we suggest, but the data is certainly consistent with the idea that agency costs and outrage play a role in the determination of university president pay.

Figure 1b

[152] Treas. Reg. § 53-4958-6(b).
[153] For a theoretical overview, see Rachel M. Hayes & Scott Schaefer, *CEO Pay and the Lake Wobegon Effect*, 94 J. FIN. ECON. 280, 281--90 (2009).
[154] Charles M. Elson & Craig K. Ferrere, *Executive Superstars, Peer Groups, and Overcompensation: Cause, Effect, and Solution*, __ J. CORP. L. __ (forthcoming 2013), manuscript at 9. For recent evidence, see John Bizjak et al., *Are all CEOs above average? An empirical analysis of compensation peer groups and pay design*, J. FIN. ECON. 538 (2011); Michael Faulkender and Jun Yang, *Inside the black box: The role and composition of compensation peer groups*, 96 J. FIN. ECON. 257 (2010); IRRC Institute, *Compensation Peer Groups at Companies with High Pay* (June 2010). *But cf.* Brian Cadman and Mary Ellen Carter, *Compensation Peer Groups and their Relation with CEO Pay* (Boston College Working Paper, Apr. 2011), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1349997 (suggesting that their evidence supports story in which selection of peer firms is mostly determined by firm size, rather than an effort to ratchet up pay).
[155] *Cf.* Elson & Ferrere, *supra* note 154, at 36--37 (suggesting that peer comparisons provide boards with mental "rule of thumb" that biases pay upwards).
[156] Elson & Ferrere, *supra* note 154, at 10--11.
[157] *See* Frumkin & Clark, *supra* note 12, at 472 (offering this hypothesis); Manny, *supra* note 63, at 536 (same).



IV. Implications

A. Implications for Tax Law and the Law of Nonprofit Organizations

The theory and evidence presented in this paper suggest that potential donor outrage constrains the compensation of private college and university presidents. Where donors have greater voice, pay is lower. We have also documented a steady upward rise in average president compensation over the decade preceding the recent financial crisis. Two questions follow. Is there reason to be concerned about executive pay in this and other nonprofit sectors? If so, what, if anything, can be done about it?

1. Reasons for Concern

Even if one accepts our view that outrage constrains university president pay, it is not obvious that pay levels are suboptimally high at institutions where current contributions are relatively insignificant. It is fair to say in these cases that compensation packages are larger than would be preferred by donors, but why are donors the arbiters of appropriate pay levels? The situation is different than in the public company executive pay realm where we, at least, are satisfied to conclude that the shareholders should be treated as principals and that deviations

from shareholder preferences should be avoided.[158] In the nonprofit sphere, the principal is less obvious. There are numerous stakeholders – customers (here students), donors, employees – but no obvious single class of principals for whom the trustees act as agents.

Nonetheless, in matters of executive pay, we believe that the preferences of nonprofit donors are more likely to be aligned with the preferences of all of the various stakeholders than are the preferences of the managers themselves. If one believes that trustees do little more than balance executive appetites for more pay against donor outrage, one is likely to conclude that pay at donor-constrained schools is more nearly optimal than at schools insulated from donor pressures.[159] If so, then the conventional wisdom among nonprofit theorists that principal-agent slack is pervasive in the sector, especially among large, complex organizations,[160] also extends to the pay-setting process. Our conclusion, then, is that university president compensation is likely to be suboptimally high at schools that are relatively insulated from donor oversight. Still, why worry? Aren't pay levels fairly modest when compared with public company executive pay?

To be sure, the presidents of the schools in our sample earn much less than the CEOs of Fortune 500 firms, whose multi-million dollar pay packages are regularly lambasted in the news, but private colleges and universities generally wouldn't be included in the Fortune 500 if they were for-profit enterprises. In terms of assets and revenues, the average private college or university more closely resembles a small cap company, at best. In 2007, the mean salary of the CEOs of the S&P Small Cap 600 was $540,000, and total mean compensation was $2.3 million.[161] Using that as a reference, mean *reported* 2007 compensation of our private college and university presidents of $455,000 is not insignificant.

In any event, the absolute dollars at stake are only a small part of the picture. The economic cost of excess compensation in this sector is likely to be much larger. The potential outrage constraint associated with substantial revenue from current contributions may distort executive decision-making. Recognizing the outrage constraint associated with healthy current donations, presidents may choose to suboptimally stress efforts to increase tuition and attract government grants and de-emphasize fundraising. Less significantly, presidents may attempt to

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[158] We are joined in this view by commentators such as Lucian Bebchuk (*see* Lucian A. Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 850-51 (2005); Lucian A. Bebchuk, *Letting Shareholders Set the Rules*, 119 HARV. L. REV. 1784, 1789 (2006)), but others would disagree. *See, e.g*., Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance,* 97 NW. U. L. REV. 547, 574-92 (2003); Stephen M. Bainbridge, *Director Primacy and Shareholder Disempowerment*, 119 HARV. L. REV. 1735, 1744-51 (2006); LYNN A. STOUT, THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HURTS INVESTORS, CORPORATIONS, AND THE PUBLIC (2012).

[159] We cannot rule out the possibility, however, that better informed trustees tend to set socially optimal pay levels when left to their own devices and that misinformed donors depress pay to suboptimally low levels when they have sufficient leverage to make a difference.

[160] Edward L. Glaeser, *Introduction*, *in* THE GOVERNANCE OF NOT-FOR-PROFIT ORGANIZATIONS 1, 36 (Edward L. Glaeser ed., 2003); Frumkin & Clark, *supra* note 12, at 482; Klick & Sitkoff, *supra* note 13, at 782.

[161] In 2007, mean sales of S&P Small Cap 600 firms were $830 million and mean assets were $1.3 billion. This compares to mean revenues of our sample of private colleges and universities of $436 million and mean total assets of $1.4 billion. S&P Small Cap data retrieved from S&P's Compustat Execucomp database on July 24, 2013.

camouflage compensation by shifting it into pensions, housing, foundation-based payments, and the like.[162] Further, in addition to depressing donations, which we have demonstrated, high president pay levels may adversely affect the morale and productivity of non-executive employees in this sector.[163]

2. What Can Be Done to Improve Donor Oversight of Nonprofits?

If donor pressure does matter at least for some kinds of governance decisions, regulators can take steps to improve the usefulness of donor behavior. For example, nonprofit regulators with scarce resources---which, in the United States, is all of them[164] ---may prefer to focus their energies on organizations that are less dependent on donors. Or they may give closer attention to organizations where donations drop noticeably. Of course, that suggestion assumes that donor pressure reduces actual rent-seeking by organization managers, rather than simply increasing managers' efforts to shroud their excessive pay. Regulations whose goal is to affect actual outcomes should ensure that disclosures reveal real information about the organization.[165]

Along these lines, recent revisions to the Form 990 instructions, if followed closely by nonprofits, should reduce considerably organizations' ability to reduce reported compensation without also diminishing its value.[166] For example, the new instructions require the organization to calculate the actuarial value of changes in a defined-benefit pension plan, and to report pensions and other deferred payments even if not yet vested.[167] So far, it is too early yet to assess fully the changes' impact. We would also recommend accurate reporting of free housing and transportation, regardless of whether those items are taxable as income for the president.

It is unclear to what extent the Form 990 Instructions provide organizations with real incentives to report accurately. Failure to comply with the instructions has no consequences, except in the extreme case in which managers and preparers are subject to fraud or abuse penalties.

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[162] *See* Bebchuk & Jackson, *supra* note 8, at 832--51, for evidence in the for-profit sector.

[163] *Cf.* James D. Cox, *Fair Pay for Chief Executive Officers*, in LAW AND CLASS IN AMERICA: TRENDS SINCE THE COLD WAR (2006) (reviewing evidence that larger disparities between executive and rank and file compensation at public companies are associated with greater employee turnover, poor morale, and lower productivity).

[164] JESSE DUKEMINIER ET AL., WILLS, TRUSTS, AND ESTATES 785--86 (8th ed. 2010).

[165] For commentary calling for increased use of Form 990 as an important regulatory tool, see Linda Sugin, *Resisting the Corporatization of Nonprofit Governance: Transforming Obedience into Fidelity*, 76 FORDHAM L. REV. 893, 924--27 (2007). For skepticism of the project, see James J. Fishman, *Stealth Preemption: The IRS's Nonprofit Governance Initiative*, 29 VA. TAX REV. 545, 558--88 (2010); Lumen N. Mulligan, *What's Good for the Goose is Not Good for the Gander: Sarbanes-Oxley Style Nonprofit Reforms*, 105 MICH. L. REV. 1981, 1996--2007 (2007).

As we have noted, a possible counter-argument to our suggestion here is that donor outrage is inefficient in some sense. But even then we doubt that camouflage is the best solution, since camouflage also creates the opportunity for rents on the part of stakeholders who are not averse to high pay. Better and more transparent stakeholder democracy, among other options, seem like better choices.

[166] Form 990 is the annual tax return for nonprofit organizations. For more extended discussion of the revisions and their governance implications, see Evelyn Brody, *Sunshine and Shadows on Charity Governance: Public Disclosure as a Regulatory Tool*, 12 FLA. TAX REV. 183, 197--201 (2012); Fishman, *supra* note 165, at 563--77.

[167] INTERNAL REVENUE SERV., INSTRUCTIONS FOR FORM 990 RETURN OF ORGANIZATION EXEMPT FROM INCOME TAX 30 (2012).

The IRS could potentially provide stronger incentives to report if the new disclosure rules were made part of the "4958 safe harbor." Again, organizations and managers that follow certain procedures, such as requiring CEO compensation to be set by independent board members after review of relevant comparable salary information for other CEO's, are presumptively insulated from statutory penalties for paying or authorizing excessive compensation.[168] Anecdotal evidence, such as Guidestar's prominent warnings about manager-level 4958 penalties shown side-by-side with links for their "comparables study" service, suggest that managers value the safe harbor, as do our findings about the effect of the 2002 final 4958 regulations.

Therefore, we propose making clear, public, and contemporaneous disclosure of the terms of each contract, along with valuations of the reasonably-expected costs of the contract terms computed along the lines of the revised 990 Instructions, a requirement of the safe harbor. For instance, the University might post prominently the actual employment agreement it signs with the President, together with calculations of the expected cost of each item.[169] That could help to ensure that donor pressure is directed towards the actual substance of each contract, not it's reporting.[170] Our data also suggest that contemporaneity is important, because delays in reporting appear to result in delays in donor behavior. As for the existing safe harbor provisions, while our evidence does not conclusively show that they have driven up pay, we think at a minimum they should be carefully re-considered.

Although we think this proposal is modest, for those concerned about the impact of uniform, inflexible federal law on the space available for innovation in nonprofit governance, we also suggest changes to default state rules. As we noted earlier, state law prohibits nonprofits from distributing profit in the form of "unreasonable" compensation, but judicial practice is to be exceptionally deferential to board decisions about what is a reasonable compensation package. Judicial deference rests on the "business judgment rule," which is just an assumption that boards are better informed and better able to manage the organization than most judges.[171] Managerial power, however, erodes the basis for the business judgment rule. In the presence of managerial power, compensation awards are not based wholly on the considered expert decisions of the board, but instead reflect in large measure the manager's own judgment about what she should be paid.

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[168] Treas. Reg. § 53.4958-6.

[169] We are grateful to Mary Bilder for this suggestion.

[170] An alternative approach would be to increase monitoring of nonprofit executive employment contracts and practices. For example, Geoffrey Manne has proposed that nonprofit organizations hire private for-profit monitoring firms that would be granted the contractual right to sue for breach of fiduciary duty, with monitors' profit objective and reputational constraints leading to efficient monitoring. Manne, *supra* note 13, at 252--264. This model may be in some disrepute following the apparent failures of credit-rating agencies to avert the 2007 credit crisis, though Manne's proposal would give rather more power to monitors than the rating agencies held.

[171] WILLIAM T. ALLEN ET AL, COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATIONS 250 (3rd ed. 2009).

We therefore propose that state law should set up a default rule under which compensation awards can be reviewed as though they were self-dealing transactions. That is, since the manager's pay is set by someone who has a stake in the outcome, judges should review those determinations much more closely and carefully than they would otherwise. Organizations able to craft alternative governance structures to deal with managerial self-dealing could opt out of the rule, but we suggest that they be required to disclose that fact prominently to donors. In that way, donors could choose which set of compensation rules they believed best protected their interests, creating a market for the most efficient rule.

Of course, if organizations believed our proposal were the best policy, they could amend their by-laws tomorrow to adopt it. We suggest that our rule be the default, however, because it is aimed mostly at protecting a diffuse group of donors and other stakeholders against the concentrated and already-entrenched interests of management. That is, we would require nonprofits to act to opt out of our proposal, rather than having to overcome the burden of inertia to opt in. Given the collective-action problems that face the stakeholders in such a contest, we agree with Bebchuk and Jackson's argument (in a parallel for-profit context) that law should stack the deck in favor of the stakeholders.[172]

B. Implications for the Managerial Power Theory of the Executive Pay Setting Process

As discussed above, to date researchers focused on public company executive pay have not found unequivocal proof that outrage constrains compensation. Prior evidence has generally been circumstantial; although the fact that boards of directors seem to take great pains to diminish the ease with which other stakeholders can add up total pay is highly suggestive, commentators have suggested pro-efficiency explanations for many of these "hidden" pay structures.[173] In contrast, we find straightforward evidence that dependence on donors puts pressure on universities to reduce reported presidential compensation, and that contributor displeasure at high reported compensation is registered through lower donations. We also find evidence consistent with the outrage constraint being set at a lower level at institutions with religious affiliations.

However, even if one views our evidence as supporting the existence of an outrage constraint at nonprofit institutions, can we extrapolate to the for-profit sector? In other words, have we found evidence of a general phenomenon or a phenomenon specific to the nonprofit universe? To be sure, donors to universities are a different kind of stakeholder than shareholders in a firm. But the differences may be smaller than they appear at first glance. In both cases, these constituencies are "represented" by a board of directors that, for the reasons discussed

[172] Lucian A. Bebchuk & Robert J. Jackson, Jr., *Corporate Political Speech: Who Decides?*, 124 HARV. L. REV. 83, 103--04 (2010).

[173] *E.g.,* Alex Edmans & Xavier Gabaix, *Is CEO Pay Really Inefficient? A Survey of New Optimal Contracting Theories*, 15 EUR. FIN. MGMT. 486, 493 (2009).

above, may be disinclined or unable to negotiate vigorously with their chief executives. At the very top, there is a similarity of structure and a similarity in agency problems.

Moreover, prior research suggests that, just as charitable contributors are motivated in part by their emotional connection to their charity,[174] so too many shareholders have preferences for "sustainable" or "no sweat" firms, or other markers of their ideological preferences.[175] Firms may donate to charity and participate in politics in part in order to shape their image for investors, employees, and customers.[176] In other words, both ideology and return on investment are part of the utility function for both nonprofit and for-profit stakeholders.

Admittedly, universities are also subject to legal limits on pay that do not bind most for-profit firms. Perhaps the responsiveness of university executive pay to donors could reflect fears that donor ire would trigger IRS scrutiny. That story is consistent with some of our results, but would not explain our finding that donors themselves respond to compensation news.

In sum, we believe the agency problems in the two spheres are sufficiently similar that the evidence provided here of outrage constraining college and university president compensation supports the hypothesis that outrage constrains pay in the public company sector. This conclusion should provide some comfort for those advocating additional transparency and shareholder voice in that sphere that reducing the agency problem is likely to improve executive compensation practices.[177]

V. Conclusion

This Article provides evidence suggesting that greater reliance on contributions as a source of funding puts downward pressure on the reported compensation of presidents of private colleges and universities, that higher disclosed compensation tends to discourage giving, and that the compensation of presidents of institutions with a religious affiliation are lower than those of peers at wholly secular schools. These results lend support to the theoretical suggestion that stakeholder outrage may constrain executive pay, and may require some updating of the conventional wisdom that investments in monitoring nonprofit pay are wasteful. For example, skyrocketing tuition remains a major social problem, and our results suggest that university president pay dynamics could well be a contributing factor.

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[174] See B. Douglas Bernheim & Antonio Rangel, *Behavioral Public Economics: Welfare and Policy Analysis with Nonstandard Decision-Makers*, *in* BEHAVIORAL ECONOMICS AND ITS APPLICATIONS 7, 25--30 (Peter Diamond & Hannu Vartiainen eds., 2008), for a review.

[175] See John L. Campbell, *Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility*, 32 ACADEMY OF MGMT. REV. 946 (2007) for a review; *see also* Rodrigues, *supra* note 13, at 1287--88 (comparing social meaning of participation in nonprofit and for-profit firms).

[176] Henderson & Malani, *supra* note 13, at 577--81. *But see* Roy Schapira, *Corporate Philanthropy as Signaling and Co-Optation*, 80 FORDHAM L. REV. 1889, 1900--18 (2012) (suggesting that evidence for this story is unclear, and offering alternatives such as possibility that corporate philanthropy is intended as a costly signal of financial strength).

[177] *Cf.* Murphy, *supra* note 10, at 855 ("Outrage costs are critical to the [Bebchuk, Fried, and Walker] analysis….").

Methodological Appendix

Data

As noted in the main text, our sample comprised all organizations appearing in both the CHE and NCES data for the years 1999 through 2007. Three hundred forty-one institutions met these criteria. Although there is some chance that limiting the sample only to universities that appear for nine consecutive years could introduce a "survivor bias," including schools that entered or exited the group midstream is more problematic. Start-up organizations, or those on the edge of collapse, may differ significantly in their organizational dynamic from the typical, long-standing and stable entities that make up most of the sample and about which we are primarily interested. Our sample extends back as far as NCES data permit for our variables of interest, and terminates at 2007 to avoid the potentially confounding effects of a severe recession on charitable giving.

We also drop select observations within the sample to account for the limitations of our data. We omit from our analyses observations in which the reported salary of the president was zero. In all cases, as best we can tell, these observations can be explained by the fact that the president in question belongs to a religious order whose members forswear material wealth. In many instances the president's order is reimbursed for his or her services, but the precise amount cannot be discerned.[178] We also omit cases in which more than one individual served as president of an institution in a single year. The Chronicle's data do not make clear whether the figures reported for partial-year service represent annualized or actual compensation, leaving us unable to determine the correct amount to include. Moreover, compensation provided in transitional years may not be representative of steady-state pay levels.

Our key variables and mean levels for each (in 2007 dollars) are reported in Table A1 below. Almost 18% of university revenue over this period was derived from gifts. Staff was unionized at 19% of these schools. Somewhat surprisingly, 46% of schools are reported as having a religious affiliation.

<Table A1>

Determinants of Pay

[178] For example, the 2009 Form 990 for Boston College reports that the university paid over $3 million to the Society of Jesuits in return for services rendered to BC by members of the order. But the return does not separately identify how much was paid for each individual employee.
As best we can tell, universities that pay their leaders a meaningful salary do not also compensate the leaders' clerical order for their services.

As described in the main text, to mitigate endogeneity concerns we employ president fixed effects and other measures of presidential human capital.[179] A potential complication, however, is that presidential pay can also affect donations, implying that regressors derived from total contributions could be correlated with lags of our dependent variable. We would argue that most of this relationship can be attributed to individual characteristics of the president already controlled for in the regression, such as fundraising prowess and tenure in office. However, to account for the possibility that past shocks to pay may have been due to luck or other factors not unique to the president, we also present separately a regression in which we control for lagged compensation.[180] Given that the first lag of pay is mathematically related to the error term of our regression, we instrument for it using the system GMM method of Bond (2002).[181] Because system GMM relies on first differences, we cannot provide estimates of invarying, constantly varying, or small-variation variables in that specification.

Although generally system GMM is more efficient than alternatives such as Hausman-Taylor, to capture estimates of the time-invarying variables we also estimate a Hausman-Taylor regression in which we treat percent gifts and percent gifts squared as endogenous to the president fixed effects. We again obtain quantitatively similar results to our OLS regression, except that the effect of religious affiliation is now similar in size to our OLS regression (at -41,759) but less precisely estimated, so that it is significant only at the 10% level. We used Schaffer & Stillman's "xtoverid" Stata routine to obtain cluster-robust standard errors for the Hausman-Taylor regressions.

As an additional check, we also use 2SLS to include several different instruments for donation-dependence. First, using firm-level data from the National Center on Charitable Statistics, we compute the total donations to all institutions of secondary and higher education in each state for each year, and divide that by total revenues at those institutions. Additionally, we use fundraising expenditures, which are strongly correlated with donations, but have no obvious causal connection to executive compensation.[182] Since we have no clear theoretical prior on whether overall fundraising is more important than fundraising per student, we employ both. In all cases, we use squares of the IV variables to instrument for percent-grants squared.

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[179] Of course, using presidents rather than universities as our panel variable means that we cannot control for unobserved university characteristics, but we believe that unlike human capital, most of the important pay-determining variation in institutions is already measured in our other data.

[180] We obtain similar results controlling only for first or for both first and second lags of compensation.

[181] Stephen R. Bond, *Dynamic Panel Data Models: A Guide to Micro-Data Methods and Practices*, 1 PORTUGUESE ECON. J. 141, 141--62 (2002).

[182] Conceivably, a nonprofit executive could extract value from the nonprofit by operating a fundraising firm and then contracting with the firm to do fundraising for the nonprofit. But most universities have policies that prohibit presidents from such extensive outside activity, and obvious conflicts of interest at that level would seldom escape close scrutiny. In addition, it might be argued that, to the extent the president is involved in fundraising, a portion of the university's reported fundraising costs may include a fraction of the president's salary. Average fundraising expenditures in our sample, however, were orders of magnitude larger than average president pay; changes in president pay should have no meaningful impact on reported fundraising.

Lastly on the robustness front, we recognize that our random-effects model relies on an assumption that the individual president effects are uncorrelated with our other regressors. As an additional check, we estimate our equation using a population-averaged panel-data model, also known as a generalized estimating equation or "GEE."[183] GEE does not require any assumptions about the relationship between the individual effect and the other regressors. It is, however, more precise if the researchers can specify the nature of the correlation between annual error terms. Standard tests show some evidence for an AR(1) process in the errors, and weak evidence for AR(2). We obtain qualitatively similar results to our random effects model under either assumption.

We also include a vector of control variables, many inspired by prior literature. As we described in Part III.B. above, researchers have found that organizational size, complexity, and status influence presidents' pay, so we control for those factors using total revenues, total full-time equivalent enrollment, log of total assets,[184] size of the faculty, faculty:FTE-student ratio, faculty mean salary, whether the university has a teaching hospital, U.S. News and World Report ranking,[185] and seventy-fifth percentile SAT scores for the entering first-year class.[186] To account for the possibility that executive salaries are influenced by peer compensation, we additionally include the mean total compensation in the sample.

In addition to president fixed effects, we attempt to account for variations in the quality of each president in several other ways. Although outcome measures are notoriously difficult to identify in nonprofit settings, we include return on assets and graduation rate as approximations of the president's success at managing the budget and ensuring student success. Since presidents likely develop fundraising connections and learn from experience, we also hand-collected and included each president's tenure in office.

To account for differences in organizational focus and mission, we include a set of indicator variables for each of the major Carnegie Institution categories, such as "research university" and "liberal-arts college." We also include a full set of state and year fixed effects (and, in unreported results, university effects),[187] which we expect to account for any variations in macro-economic factors, the tax-price of giving, or major regulatory differences across time and institutions.

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[183] *See* Joseph C. Gardiner et al., *Fixed Effects, Random Effects, and GEEL What are the Differences?*, 28 STAT. IN MED. 221, 227--39 (2009) for an overview of the tradeoffs between the RE and GEE models.

[184] We use the natural log of assets because assets are highly skewed in our sample.

[185] We control for U.S. News rankings using indicator variables for U.S. News tiers in each of the research university and liberal arts college undergraduate hierarchies. Unranked schools were coded as "third tier." U.S. News used a different reporting methodology for the 2002 academic year; regressions including U.S. News ranking omit data from that year. Including 2002 but omitting U.S. News ranking does not change our results.

[186] SAT scores and U.S. News rankings are highly correlated. Unsurprisingly, omitting one tends to produce considerably more significant results for the other. Our main outcomes are robust to including only one of the two.

[187] Our results are similar but less precise when university effects are included.

Finally, as in Sorokina (2003), we employ lags of all of our regressors.[188] Presidential salaries are set in advance of the academic year. The factors that determine compensation should logically be those prevailing at that time. Although of course there is usually a strong correlation between most regressors and their lags, such that other studies using same-year data are likely still largely reliable, we believe our measures are more precise.

We employ a random-effects model with robust standard errors clustered by president.[189] We use levels rather than logs because our equation includes both gifts and gifts squared. Our main results are reported in Table A2, below. For ease of reading, we omit state, year, and Carnegie-category effects and most insignificant controls.

<Table A2>

Admittedly, the 2SLS regression provides surprisingly large coefficients for the effects of donation-dependence. We argue that our OLS result is probably biased upwards, but the difference here seems too large to be explained solely by bias in the OLS estimate. Weak instruments would be a logical suspect, except that LIML estimates of the coefficients were quite close to those reported, which argues against a weak instrument problem.[190] Possibly one or more of the instruments are picking up some other unobserved influence.[191] Accordingly, we view the 2SLS results as only weakly confirming our results.

Determinants of Donations

As with the determinants of pay regressions, we also report two additional specifications as robustness checks on our OLS results. In one specification we include lags of donations as a control for the possibility that, say, year-2000 donations affected year 2001 compensation.

We also estimate a 2SLS regression using same-year compensation and number of executive employees per student as instruments for the lag of compensation. We suggest that the president's compensation during the same academic year as the dependent variable is an appropriate instrument for lags of compensation. Because both compensation and donations can respond to each other only with at least a one-year delay, there should be no simultaneous causation between contemporary levels of each. Although some omitted variable, such as university performance, may contribute to both, as in Andreoni & Payne (2011) we control for these potential confounds --- in our case, by using president fixed effects and observable

[188] Sorokina, *supra* note 118, at 4.
[189] A Hausman test could not reject the null hypothesis that the RE estimator was consistent.
[190] JOSHUA D. ANGRIST & JORN-STEFFEN PISCHKE, MOSTLY HARMLESS ECONOMETRICS 209 (2009).
[191] Another potential explanation is that university donations also affect state-level donations. The mean proportion of university to state donations in our sample was 8%, which may suggest that the state-level donations instrument is not fully exogenous. To test this, we repeated our regressions, dropping observations where the university's contributions to state donations exceeded 10%. This brought the mean down to 2.3%, but we still obtained the same large coefficients.

measures of performance.[192] Therefore, we arguably should be able to eliminate any correlation between same-year pay and the error terms of the regression. The theory behind the proportion of executives is that it measures factors, such as principal-agent slack and institutional complexity, that should correlate with pay but do not have any evident direct connection to donations. Both instruments are strongly correlated with lags of compensation in first-stage regressions.

As in the pay regressions, we control for a variety of institutional and other factors, including fundraising, fundraising squared, state, year, and Carnegie-category fixed effects. Because the literature suggests that funding from other sources may either encourage or discourage private contributions,[193] we control for both grants and liabilities. We attempt to capture variation in fund-raising skill using years in office. We also control for measures of mission success, institutional prestige, and wealth of the donors, such as U.S. News ranking, tuition, revenues, assets, mean faculty salary, and graduation rate. We control for the size of the alumni body with enrollment, and for the possibility that undergraduates have more intense connections to their alma mater with the fraction of enrollees who are undergraduates.

Our results are summarized in Table A3, below.

<Table A3>

For the most part our additional results confirm our OLS findings, although the 2SLS result for compensation is just shy of being significant at the 5% level. As before, we obtain similar results using GEE to double-check our FE results; the combined effect of lagged compensation in the GEE regression was a bit larger, at -45. And once more, our 2SLS estimates for the main variable of interest are larger than the others, although the difference here is not as great. We therefore interpret the 2SLS result as lending some support to the idea that the OLS estimates are biased upwards.

[192] James Andreoni & A. Abigail Payne, *Is Crowding Out Due Entirely to Fundraising? Evidence from a Panel of Charities*, 95 J. PUB. ECON. 334, 340 (2011).
[193] *E.g.*, *Id.* at 335; Cagla Okten & Burton A. Weisbrod, *Determinants of Donations in Private Nonprofit Markets*, 75 J. PUB. ECON. 255, 268--69 (2000).

Table A1:
Descriptive Statistics
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Variable |	Observations	Mean	Std. Dev.
% of Revenue from Gifts |	2990	.177	.190
Annual Gifts |	2990	39984	91596
Full-time Equivalent Enrollment |	2991	4808.47	4646.90
F/T Execs. per 100 FTE Students |	2969	2.84	2.19
Fundraising	2641	9996	22440
Graduation Rate |	2128	.69	.16
Gross Assets |	2991	1191360	3814800
Hospital? (Indicator) |	2136	.05	.21
Liabilities |	2991	310080	1446360
Mean Faculty Salary |	2689	71.27	15.87
Reported Pres. Benefits |	3565	53.59	88.96
Reported Pres. Salary |	3578	286.88	180.76
Revenues -- All Sources |	2991	322320	756840
Revenues from Tuition |	2991	116484	139218
Revenues from Grants |	2919	40596	121788
Return on Investment |	2987	67728	359040
Religious Affiliation? (Indicator) |	3620	.46	.50
President's Years in Office |	3620	7.30	6.41
SAT - 75th %ile |	2263	1293	125.3
Staff Unionization (Indicator)	2811	.19	.39
Total Reported Pres. Compensation |	3336	364.96	214.20

Note: All dollar figures reported in thousands of 2007 dollars.
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Table A2:
Determinants of University President Compensation
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	OLS	Arellano-Bond	2SLS
% gift	**-287,283.30**	**-169,919.3**	**- 1,978,243**
	(97,641.16)**	**(78,316.16)***	**(814,671.50)****
% gift squared	**549,525.79**	**336,157.6**	**3,020,202**
	(195,669.68)**	**(186,532.4)***	**(1366988)***
Relig. affil.	**-43,180.33**		**- 25,310.71**
	(10,356.59)***		**(11,549.74)***
Staff union	-11,526.80		2020.57
	(19,107.65)		(14,072.34)
Tuition	**0.00070**	**. 00028**	**.0010**
	(0.00022)**	**(0. 000051)***	**(0. 00037)****
Revenues	7.3e-6	0. 0000148	-0. 0000292
	(0.000033)	(0. 000020)	(0. 000047)
RoI	-0.000044	-0. 000024	-0. 000044
	(0.000035)	(0. 000026)	(0.000047)
Log assets	**17,425.49**		**28,201.06**
	(9,019.90)*		**(11,487.42)****
Grants	-0.000050	8.94e-06	0. 000040
	(0.000081)	(0. 000079)	(0.00019)
Fac. salary	**2.64**	**2.73**	**2.61**
	(1.01)**	**(0. 45)*****	**(1.32)***
Enrollment	-3.42		- 8.89
	(2.31)		(4.97)
Mean pres. pay	-0.46	**0. 41**	-3.00
	(1.57)	**(0. 10)*****	(2.24)
Years in offc.	**2,840.02**		**2,661.42**
	(626.68)***		**(706.29)*****
R-squared	.60		.48
N	1,398	1,398	1,088

Notes:
*: statistically significant at the 5% level against a two-sided test of the null
**: statistically significant at the 1% level against a two-sided test of the null
***: statistically significant at the .1% level against a two-sided test of the null
Robust standard errors clustered by president. All regressors are lagged one year. Control variables insignificant in all specifications are not reported. OLS and 2SLS regressions include state and year fixed effects; GMM regression includes year effects. Dollar figures reported in 1983 dollars.
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Table A3:
Determinants of Annual Contributions
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	OLS	Arellano-Bond	2SLS
Lags of comp.	**-30.55**	**-28.36**	-61.74
(total 1st & 2d)	**(12.27)***	**(5.79)*****	(32.21)
Revenues	**0.062**	**0.0420**	**0.063**
	(0.0012)***	**(0.0025)*****	**(0.0028)***
Tuition	-0.13	**0.1226**	-0.043
	(0.137)	**(0.021)*****	(0.045)
Fundraising	1.86	**2.3488**	**2.26**
	(1.20)	**(0.3143)*****	**(0.6017)***
Fundraising ^2	-6.95e-8	**-6.37e-8**	**-7.87e-8**
	(4.70e-8)	**(1.07e-8)*****	**(1.97e-8)***
Grants	0.16	**0.044**	**0.28**
	(0.126)	**(0.0151)****	**(0.023)****
Liabilities	0.0018	**0.0041**	**0.0036**
	(0.0013)	**(0.0011)*****	**(0.0007)***
Log assets	3,222,737.78		1,267,480.71
	(2,204,103.76)		(1,764,298.85)
Enrollment	2,573.90	**-1,488.99**	882.58
	(1708)	**(265.47)*****	(691.54)
Fac. salary	207.55		**526.38**
	(231.91)		**(222.65)***
US News Top 25	**27,414,397.74**		9,855,543.69
	(12,987,490.09)*		(9,045,568.049)
Faculty:student	**-1,923,948.12**		**-2,193,387.77**
	(787,798.9)**		**(284,323.08)*****
Years in offc.	43,424.91		122,064.93
	(157,480.11)		(120,069.21)
R-squared	.90		.92
N	1,185	965	1,185

Notes:
*: statistically significant at the 5% level against a two-sided test of the null
**: statistically significant at the 1% level against a two-sided test of the null
***: statistically significant at the .1% level against a two-sided test of the null
Robust standard errors clustered by president. Control variables insignificant in all specifications are not reported. OLS and 2SLS regressions include state and year fixed effects; GMM regression includes year effects. Dollar figures reported in 1983 dollars.
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