
**NONPROFIT EXECUTIVE PAY AS AN AGENCY
PROBLEM: EVIDENCE FROM U.S. COLLEGES AND
UNIVERSITIES**

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Managers' pay, and the way it is determined, can have an important impact on the success of firms, and even of whole economies. While there is a rich literature exploring these issues in the for-profit sector, managerial pay at nonprofit firms has received little attention. Yet nonprofit organizations suffer from agency problems that are similar to, or perhaps even more severe than, those observed at for-profit companies. Accordingly, this Article explores the implications for nonprofit governance of a world in which "managerial power" can affect nonprofit pay setting. This Article develops the theory and provides support in the form of original empirical evidence based on data from a large panel of colleges and universities collected across a ten-year period. Our findings support the hypothesis that donors with less leverage suffer from significant agency costs in setting president pay. For example, we find for the first time evidence of an otherwise counterintuitive negative association between the fraction of university revenue provided by current donations and president compensation, which we suggest shows that schools that are less dependent on donors are freer to set high 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.

INTRODUCTION

Why is higher education so expensive? In the decade between 1997 and 2007, net tuition and fees per student—that is, the price tag for a degree, even after financial aid—at 387 selective private colleges and universities rose by more than 26% in real, inflation-adjusted dollars.¹ The situation today is so critical that the U.S. Department of Education reportedly is considering direct

¹ Authors' calculation based on data collected from the National Center for Education Statistics. For additional detail, see U.S. DEP'T OF THE TREASURY WITH U.S. DEP'T OF EDUC., *THE ECONOMICS OF HIGHER EDUCATION* 18-24 (2012).

regulation of private education pricing.² Governmental command and control is certainly one option for correcting failing markets, but often a more effective alternative is to understand the motives of the individual humans who are at work, and then to more subtly align their incentives with the best policies.³ For example, many recent commentators have pointed to executive pay reform as a possible solution to the banking-system problems that led to the 2007-08 financial crisis.⁴

In this regard, it is hard to overlook the fact that the compensation of the presidents of private U.S. colleges and universities has also risen at a rapid clip over the past fifteen years. In the same decade between 1997 and 2007, average president pay at the same 387 schools increased by 50% in real terms, far outpacing gains in overall university expenditures.⁵ In 2011, 42 private university presidents received pay packages in excess of one million dollars.⁶

In this Article we argue that growth in tuition and compensation are potentially related phenomena, and report new evidence in support of our theory. In our view, both are products of agency problems of the kind familiar to most observers of large for-profit firms.⁷ Opportunities to draw higher pay, or the need to justify outsize reward packages, may drive decisions about how to fund the university or how selective to be with the student body. We test our hypothesis by studying the statistical relationships between pay, institutional outcomes such as tuition, and the relative significance of university donors who might be expected to monitor how presidents perform and are paid. Although we'll report several possible interpretations of our findings, we suggest that each of them implies that rules of executive compensation and

² See Scott Jaschik, *Obama's Ratings for Higher Ed*, INSIDE HIGHER ED (Aug. 22, 2013, 3:44 AM), archived at <http://perma.cc/4MZE-VDAB>.

³ Brian Galle, *The Tragedy of the Carrots*, 64 STAN. L. REV. 797, 806-09 (2012); Cameron Hepburn, *Regulation by Prices, Quantities, or Both: A Review of Instrument Choice*, 22 OXFORD REV. ECON. POL'Y 226, 228-29 (2006).

⁴ E.g., Lucian A. Bebchuk & Holger Spamann, *Regulating Bankers' Pay*, 98 GEO. L.J. 247, 250-51 (2010); Jeffrey N. Gordon, *Corporate Governance and Executive Compensation in Financial Firms*, 2012 COLUM. BUS. L. REV. 834, 838-50; Frederick Tung, *Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation*, 105 NW. U. L. REV. 1205, 1206 (2011).

⁵ Authors' calculation based on data collected from the National Center for Education Statistics. See also *infra* Part III.A (charting an increase in average president pay using a sample of 341 colleges and universities and comparing that increase to other university expenses).

⁶ Jonah Newman & Brian O'Leary, *Executive Compensation at Private Colleges, 2011*, CHRON. HIGHER EDUC. (Dec. 15, 2013), archived at <http://perma.cc/G22J-CDN5>.

⁷ Agency costs arise when stakeholders or principals must rely on imperfectly controlled managers or "agents"—who do not always act in the best interest of the stakeholders—for direction of the organization. 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).

nonprofit governance could be important levers for improving education policy.

Prior commentators have missed these connections because the agency cost story of executive compensation has focused on the for-profit sector and, in large part, on executive pay at publicly traded companies.⁸ There has been relatively little research on executive pay in the nonprofit sector.⁹ Commentators recognize that agency problems exist in the nonprofit sphere, allowing managers to run organizations in ways donors or other stakeholders might not approve.¹⁰ But while managers may make some choices donors

⁸ The literature is both voluminous and highly interdisciplinary. Important contributions have come from law, economics, corporate finance, and accounting, among other fields. Surveys include John E. Core et al., *Executive Equity Compensation and Incentives: A Survey*, *ECON. POL'Y REV.*, Apr. 2003, at 27; Carola Frydman & Dirk Jenter, *CEO Compensation*, 2 *ANN. REV. FIN. ECON.* 75 (2010); Kevin J. Murphy, *Executive Compensation*, in *3B HANDBOOK OF LABOR ECONOMICS* 2485, 2508-10 (Orley Ashenfelter & David Card eds., 1999); and David I. Walker, *The Law and Economics of Executive Compensation*, in *RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW* 232 (Claire A. Hill & Brett H. McDonnell eds., 2012).

There is also an emerging literature on executive pay in the private equity/venture capital arena. See Robert J. Jackson, Jr., *Private Equity and Executive Compensation*, 60 *UCLA L. REV.* 638 (2013); Phillip Leslie & Paul Oyer, *Managerial Incentives and Value Creation: Evidence from Private Equity* 8 (Nov. 2009) (unpublished manuscript), available at <https://faculty-gsb.stanford.edu/oyer/wp/pe.pdf>, archived at <http://perma.cc/QE77-2JBF>.

⁹ See Kevin F. Hallock, *Managerial Pay and Governance in American Nonprofits*, 41 *IND. REL.* 377, 404 (2002) (“[L]ittle is known about the compensation of managers of nonprofits from an empirical point of view.”). For prior discussions of the dynamics of nonprofit compensation in the legal literature, see generally Roger 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. HAW. L. REV.* 425 (1999); Consuelo Lauda Kertz, *Executive Compensation Dilemmas in Tax-Exempt Organizations: Reasonableness, Comparability, and Disclosure*, 71 *TUL. L. REV.* 819 (1997); Benjamin Moses 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. Leff, *supra*, 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. See, 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).

¹⁰ E.g., Henry B. Hansmann, *The Role of Nonprofit Enterprise*, 89 *YALE L.J.* 835, 843-51 (1980); M. Todd Henderson & Anup Malani, *Corporate Philanthropy and the Market for Altruism*, 109 *COLUM. L. REV.* 571, 598-600 (2009); Jill R. 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 *WIS. L. REV.* 1, 4-6; Geoffrey A. Manne, *Agency Costs and the Oversight of Charitable Organizations*, 1999 *WIS. L. REV.* 227, 230-36; Mark Pauly & Michael Redisch, *The Not-for-Profit Hospital as a*

would not, the dominant view is that nonprofit managers can largely be trusted not to overpay themselves, because they are committed to their cause, and because monitoring by nonprofit boards and peers is effective at constraining any excessive compensation.¹¹ Perhaps as a result, to our knowledge no prior work considers what should become of nonprofit law in a world in which managerial pay, too, is subject to serious agency problems.¹²

In contrast, the relationship between managerial agency problems and for-profit executive pay has been a central focus of academic research over the last several decades.¹³ A key question has been whether pay practices reflect agency problems or mitigate those problems or both.¹⁴ One school of thought

Physicians' Cooperative, 63 AM. ECON. REV. 87 (1973); Usha Rodrigues, *Entity and 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. ACCT. & 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 H. Sitkoff, *Agency Costs, Charitable Trusts, and Corporate Control: Evidence from Hershey's Kiss-Off*, 108 COLUM. L. REV. 749, 816 (2008).

¹¹ See, e.g., MARC JEGERS, MANAGERIAL ECONOMICS OF NON-PROFIT ORGANISATIONS 59-60 (2008); 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 citing evidence that it seems to guide nonprofit boards); Eugene F. Fama & Michael C. Jensen, *Separation of Ownership and Control*, 26 J.L. & ECON. 301, 318-19 (1983) [hereinafter Fama & Jensen, *Separation*]; Gregory O. Jobome, *Management Pay, Governance and Performance: The Case of Large UK Nonprofits*, 22 FIN. ACCOUNTABILITY & MGMT. 331, 334 (2006); Bruce R. Kingma, *Public Good Theories of the Nonprofit Sector: Weisbrod Revisited*, 8 VOLUNTAS 135, 142 (1997). In the case of universities, Fama & Jensen argue that internal monitoring by other constituencies, such as faculty, and outside reviewers allow inexperienced 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.

¹² However, as we will explain, some earlier findings can be explained through that lens. E.g., Edward A. Dyl et al., *Governance and Funds Allocation in United States Medical Research Charities*, 16 FIN. ACCOUNTABILITY & MGMT. 335, 338 (2000) (reporting that the presence of managers on boards 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 the nonprofit sector is more highly correlated with donations in states where the Attorney General has fewer oversight powers).

¹³ See *supra* note 8.

¹⁴ 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. Lucian Arye Bebchuk & Jesse M. Fried, *Executive Compensation as an Agency Problem*, 17 J. ECON. PERSP. 71, 72 (2003). For more details, see *infra* Part I.A.

—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.¹⁵ 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,” the emotional and ideological responses of the shareholders and press watchdogs who notice what is happening.¹⁶

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. As the main evidence for their claim, managerial power theorists point to the highly opaque pay structures managers have constructed for themselves.¹⁷ They say these structures serve no other important purpose for the firm except to reduce outrage at the amount the managers earn, and often inefficiently distort the way managers choose to run the firm.¹⁸ Critics, however, point to possible justifications for some arcane pay practices.¹⁹

Managerial power theorists have so far had to rely largely on inference. Therefore, an additional contribution of this project is to directly test the theory that managers exert power over their own pay, and that stakeholder outrage can constrain that power. Given the central roles played by emotion and ideology in the formation and support of charitable organizations, the nonprofit sector

¹⁵ Lucian Arye Bebchuk, Jesse M. Fried & David I. Walker, *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751, 783-86 (2002); see also Bebchuk & Fried, *supra* note 14, at 72, 75-92 (2003).

¹⁶ Bebchuk et al., *supra* note 15, at 786-88.

¹⁷ *Id.* at 789; Lucian A. Bebchuk & Robert J. Jackson, Jr., *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).

¹⁸ Bebchuk et al., *supra* note 15, 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).

¹⁹ 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 et al., *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 Incentive Pay: Evidence from Executive Pensions and Deferred Compensation*, 38 J. CORP. L. 53, 57-64, 82-86 (2012).

seems to be a promising laboratory for exploring the nuances of an outrage-focused managerial power theory. 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. Those rules, in turn, can help to prevent managerial behaviors—such as authorizing run-ups in tuition and enrollment—that arguably are influenced by poorly governed pay-setting processes.

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 1997 through 2008. 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.²⁰ 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.²¹ 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.

Furthermore, 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.²² The theory here is that active donors provide a source of potential outrage 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.

We also find suggestive correlations between pay, donor control, and

²⁰ 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.

²¹ *See infra* note 151 and accompanying text.

²² *See infra* Part III.C.

outcomes such as tuition and enrollment.²³ Pay and tuition are correlated, even when we employ statistical tools to hold constant common factors, such as school quality, that might explain the linkage. We additionally report (as we detail in more depth in related work) that presidents respond to tighter control from donors by shifting to forms of revenues that are less constraining.

This Article begins by providing background and a brief overview of the leading theories of the executive pay setting process in Part I. 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. 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 education, 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 this 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.

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.²⁴ 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.²⁵ As described by Michael Jensen and

²³ See *infra* Part III.D.

²⁴ 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. See *id.* at 285-87.

²⁵ See, e.g., Core et al., *supra* note 8, at 27.

William Meckling, these agency costs reflect the divergence between managers' share-value-maximizing actions and managers' actual actions, plus the monitoring and bonding expenditures (including contracting costs) undertaken to reduce that divergence.²⁶ Under this view, equity compensation arrangements through which managers receive restricted stock, stock options, and the like are seen as minimizing agency costs by aligning the incentives of the executives with those of presumably diversified shareholders with respect to share value and risk.²⁷

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.²⁸ As a result, all else being equal, these executives would be more risk averse than their shareholders, who can easily diversify.²⁹ Paying executives with restricted company stock³⁰ 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.³¹ This is the optimal contracting explanation for the prevalence of option compensation.³²

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 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

²⁶ Jensen & Meckling, *supra* note 7, at 308-09.

²⁷ Core et al., *supra* note 8, at 29-33; Frydman & Jenter, *supra* note 8, at 88-89.

²⁸ Core et al., *supra* note 8, at 33.

²⁹ *Id.*

³⁰ Typically, compensatory stock becomes unrestricted, or "vests," somewhere from one to five 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 5-6, 12-13 (2009), available at http://www.fwcook.com/alert_letters/2009_Top-250-Report.pdf, archived at <http://perma.cc/KQ78-943N>.

³¹ 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 8, at 236-38.

³² 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).

reflect agency costs.³³ The managerial power story begins with the observation that many features of executive compensation arrangements—such as option designs that allow executives to reap windfalls during bull markets—appear to be inconsistent with a share-value-maximizing model.³⁴ 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.³⁵ 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.³⁶

The threat (or reality) of investor and financial press outrage plays an important role in disciplining executive compensation under the managerial power view.³⁷ 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.³⁸ 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.³⁹ 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 commitments often are key factors in groups that successfully

³³ Bebchuk et al., *supra* note 15, at 784.

³⁴ *Id.* at 795-817.

³⁵ *Id.* at 771-74.

³⁶ *Id.* at 774-79.

³⁷ *Id.* at 786-88.

³⁸ *Id.* at 789-91.

³⁹ *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.⁴⁰ Managers would then aim to avoid outrage as a way of ensuring that their principals continue to only loosely monitor management.

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 compensation⁴¹ or backdated stock options,⁴² and we infer that they do so to minimize outrage over pay levels. Some commentators have argued that insufficient pay for performance sensitivity⁴³ or a lack of relative performance evaluation⁴⁴ undermines the persuasiveness of the optimal contracting theory, but others remain unconvinced.⁴⁵

The totality of the evidence does not support any single theoretical framework regarding executive compensation in the for-profit sector. In fact, it seems likely that the optimal contracting and managerial power views co-exist,

⁴⁰ 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).

⁴¹ Bebchuk & Jackson, *supra* note 17, 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).

⁴² 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.”).

⁴³ 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”).

⁴⁴ 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 Holmstrom, *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).

⁴⁵ Brian J. Hall & Jeffrey B. Liebman, *Are CEOs Really Paid Like Bureaucrats?*, 113 Q. J. ECON. 653, 653-56 (1998) (finding that increased pay for performance sensitivity undermines the view that CEOs are paid like bureaucrats, whose performance or lack thereof has no bearing on pay); see also George P. Baker & Brian J. Hall, *CEO Incentives and Firm Size*, 22 J. LAB. ECON. 767 (2004) (attributing “the existence of expensive corporate staffs in large firms” to “the high marginal product of CEO effort in [those] firms”); Core et al., *supra* note 8, at 31-32 (summarizing arguments against managerial power view); Brian J. Hall & Jeffrey B. Liebman, *The Taxation of Executive Compensation*, 14 TAX POL’Y & ECON. 1, 7 (2000) (describing corporate incentive “to give more pay in the form of bonuses and stock options,” since most qualify as performance-based compensation for which a corporate deduction is allowed).

providing relatively more or less explanatory power at particular companies and at particular times.⁴⁶

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

In contrast, the dominant view among commentators is that excessive pay is not a pervasive concern in the nonprofit sector, and U.S. law largely reflects that view. 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."⁴⁷ Intellectual leaders in both compensation design and nonprofits, ranging from incentive-pay godfathers Eugene Fama and Jensen to Susan Rose-Ackerman and Burton Weisbrod, have made similar claims.⁴⁸

These authors argue that self-selection, ideological alignment with donors, and "stewardship" constrain rent-seeking by managers at nonprofit organizations.⁴⁹ 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.⁵⁰ Instead, commentators argue, nonprofit managers are motivated primarily by a drive to help others or otherwise to fulfill some ideological mission.⁵¹ Taking cash from the organization would diminish its capacity to

⁴⁶ Some commentators believe that director oversight and the quality of executive pay practices at public companies have improved in recent years as a result of mandated "say on pay" votes; greater involvement of proxy advising firms, such as Institutional Shareholder Services; and the like. *See, e.g.*, Steven N. Kaplan, *CEO Pay and Corporate Governance in the U.S.: Perceptions, Facts, and Challenges*, 25 J. APPLIED CORP. FIN. 8, 24 (2013).

⁴⁷ JEGERS, *supra* note 11, at 60 (quoting Jobome, *supra* note 11, at 350).

⁴⁸ *See infra* note 51.

⁴⁹ *See supra* note 11.

⁵⁰ Caers et al., *supra* note 11, at 31; Femida Handy & Eliakim Katz, *The Wage Differential Between Nonprofit Institutions and Corporations: Getting More by Paying Less?*, 26 J. COMP. ECON. 246, 249-50 (1998).

⁵¹ *See supra* note 11; Eugene F. Fama & Michael C. Jensen, *Agency Problems and Residual Claims*, 26 J.L. & ECON. 327, 344-45 (1983) [hereinafter Fama & Jensen, *Agency Problems*]; Myron J. Roomkin & Burton A. Weisbrod, *Managerial Compensation and Incentives in For-Profit and Nonprofit Hospitals*, 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) [hereinafter Rose-Ackerman, *Altruism*] (suggesting that ideological commitment helps to overcome agency problems in some nonprofits); Susan Rose-Ackerman, *Ideals Versus Dollars: Donors, Charity Managers, and Government Grants*, 95 J. POL. ECON. 810, 812 (1987). *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) (recognizing that boards of complex nonprofits have many members, creating substantial opportunities for free riding).

accomplish its goals, which the manager presumably shares.⁵² 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.⁵³

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.⁵⁴ The separation in nonprofits is even more severe, as they lack several control mechanisms, such as the pressure of shareholder voting or exit, that for-profits can employ.⁵⁵ As a result, managers have a great deal of freedom to run the organization as they please. If so, they may have less of an incentive to extract excess compensation from the organization; the money is essentially under their control either way.⁵⁶

These theories, though popular, have not been subjected to much empirical testing. Gregory Jobome argues, on the basis of a survey of U.K. nonprofits, that he finds evidence in support of the stewardship hypothesis, though it would be more accurate as a statistical matter to say that he fails to find evidence rejecting it.⁵⁷ Other authors have claimed, based on findings that link presidential compensation to “quality” measures such as the *U.S. News & World Report* ranking, that university presidents are being paid in accordance with the size and complexity of their institutions and with performance.⁵⁸ But the fact that better managers are paid more does not rule out the possibility that all managers are paid too much, or that significant agency slack remains. Similarly, findings that for-profit managers on average earn more than their nonprofit counterparts tell us only that nonprofit managers receive some non-pecuniary rewards from their jobs, and not whether they also take opportunities to award themselves more cash when possible.⁵⁹

Nonprofit governance in the real world mirrors the dominant academic view in taking a highly laissez-faire view of executive pay. State attorneys general

⁵² JEGERS, *supra* note 11, at 59; see Rose-Ackerman, *Altruism*, *supra* note 51, at 719-20 (arguing that managers trade off cash pay for ability to achieve ideological goals).

⁵³ 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)

⁵⁴ Fama & Jensen, *Separation*, *supra* note 11, at 308-10, 319.

⁵⁵ See *supra* note 11; *supra* note 51.

⁵⁶ See JEGERS, *supra* note 11, at 58-59; Rose-Ackerman, *Altruism*, *supra* note 51, at 719-20.

⁵⁷ 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. Jobome, *supra* note 11, at 350-51.

⁵⁸ Thomas Li-Ping Tang et al., *Factors Related to University Presidents’ Pay: An Examination of Private Colleges and Universities*, 39 *HIGHER EDUC.* 393, 411 (2000).

⁵⁹ See JEGERS, *supra* note 11, at 58-60, for a review of the relevant findings.

are responsible for nonprofit oversight, including oversight of executive compensation.⁶⁰ 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.⁶¹ 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.⁶²

Another possible limitation is built into the federal tax code. Under I.R.C. § 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.”⁶³ 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.⁶⁴ 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.⁶⁵

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.⁶⁶ 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.⁶⁷

⁶⁰ MARION R. FREMONT-SMITH, *GOVERNING NONPROFIT ORGANIZATIONS: FEDERAL AND STATE LAW AND REGULATION* 54 (2004).

⁶¹ Manne, *supra* note 10, at 250-51; see Frumkin & Andre-Clark, *supra* note 9, at 441-47; 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 MODERN NONPROFIT SECTOR* (2001)).

⁶² FREMONT-SMITH, *supra* note 60, at 53.

⁶³ I.R.C. § 501(c)(3) (2012). 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).

⁶⁴ I.R.S. Gen. Couns. Mem. 39,674 (Oct. 23, 1987) (concluding that profit-sharing arrangements for physicians at nonprofit hospitals were not per se illegal but would be scrutinized closely by the IRS).

⁶⁵ Frumkin & Andre-Clark, *supra* note 9, at 467.

⁶⁶ I.R.C. § 4958 (2012); Treas. Reg. § 53.4958-1 (2002). 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. ENTREPRENEURSHIP & L. 243, 251-70 (2012).

⁶⁷ Treas. Reg. § 53.4958-1, -4(b)(1)(ii) (2002).

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.⁶⁸ The rules offer a “safe harbor”⁶⁹ 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.⁷⁰ If these criteria are met, the burden shifts to the IRS to show that a pay grant was an excess benefit transaction.⁷¹ Organizations can defend their award by pointing to pay in similar for-profit industries,⁷² and first-time contracts are exempt from any excess-benefit scrutiny at all.⁷³

II. TOWARDS A THEORY OF MANAGERIAL POWER IN THE NONPROFIT SECTOR

In our view, the standard account of nonprofit executive compensation is too optimistic. In this Part we will argue that money can drive a significant wedge between the interests of managers and those who are invested in the success of their firms. 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.

A. *What Matters to Nonprofit Managers?*

While nonprofit managers may highly value mission, ideology, or prestige, powerful empirical evidence suggests that they also can be motivated by money. 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.⁷⁴ These data points imply at least that the boards that set executive pay believe it influences managers.

Prior commentators recognize this basic point, but seemingly assume that

⁶⁸ Jill S. Manny, *Nonprofit Payments to Insiders and Outsiders: Is the Sky the Limit?*, 76 *FORDHAM L. REV.* 735, 736 (2007).

⁶⁹ *Id.*

⁷⁰ *Treas. Reg.* § 53.4958-6(a) (2002).

⁷¹ *Id.* § 53.4958-6(b).

⁷² *Id.* § 53.4958-4(b)(1)(ii).

⁷³ *Id.* § 53.4958-4(a)(3).

⁷⁴ *See Hines et al., supra* note 63, at 1194-98.

managerial desire for higher pay is limited and will not undermine executives' incentives to serve the interests of the firm's stakeholders.⁷⁵ 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.⁷⁶

We think that managers are unlikely to make this trade-off 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; as earlier work demonstrates, even altruists should typically prefer to free ride on the contributions of others.⁷⁷

Next, defenders of the status quo also note that higher compensation could cost the manager some of the reward that comes in the form of "warm glow."⁷⁸ Nonprofit 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.⁷⁹ Part of the manager's satisfaction from doing her job may be the approval of peers or others.⁸⁰ Game theory and evolutionary biology, among other disciplines, offer explanations for why humans might admire and reward our self-sacrificing colleagues.⁸¹ Managers who value these rewards

⁷⁵ See *supra* note 11.

⁷⁶ See *supra* note 56.

⁷⁷ James Andreoni, *Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving*, 100 *ECON. J.* 464, 464-65 (1990). That is, pure altruists are those who want to see others do well solely because they care about those others' wellbeing. Therefore, the altruist is equally happy if others' lives are better, whether that outcome was caused by the altruist or not. If improvements are costly, the altruist is best off when someone else pays for the benefits the altruist hopes will occur.

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, *Altruism*, *supra* note 51, at 713, but this would not be the case for one employee in a large firm.

⁷⁸ See Fama & Jensen, *Agency Problems*, *supra* note 51, at 344; Rose-Ackerman, *Altruism*, *supra* note 51, at 714.

⁷⁹ For a review of the evidence on warm glow compensation, see Laura Leete, *Work in the Nonprofit Sector*, in *THE NONPROFIT SECTOR: A RESEARCH HANDBOOK*, *supra* note 40, at 159, 159-65, and for more extended discussion, see Brian Galle, *Keep Charity Charitable*, 88 *TEX. L. REV.* 1213, 1223-25 (2010).

⁸⁰ Galle, *supra* note 79, at 1223.

⁸¹ See, e.g., Ernst Fehr & Urs Fischbacher, *The Nature of Human Altruism*, 425 *NATURE* 785 (2003); David G. Rand et al., *Direct Reciprocity with Costly Punishment: Generous Tit-for-Tat Prevails*, 256 *J. THEORETICAL BIOLOGY* 45 (2009).

might lose some of them if they are observed to draw a large paycheck.⁸²

We would argue in response that lower pay is not necessarily the only way to preserve the manager's "glow." If warm glow is comprised in large part of the approval of others, the manager can have her cake and eat it too, by ensuring that her high pay is opaque to outside eyes. And opacity may be easy to obtain, since even strong boards of directors might willingly provide opaque pay if it allows them to save on extra cash they would otherwise have to pay the manager (and maximize their own social approval).

A last argument against the possibility of excess managerial pay in the nonprofit sector is that 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.⁸³ 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.⁸⁴ But nonprofit employers are usually tax-exempt and so have no need for deductions.⁸⁵ Rewarding employees with psychic benefits rather than cash would therefore be wholly tax favorable for most nonprofit firms.

These kinds of tax considerations seem to be a secondary consideration in many pay-setting contexts, however.⁸⁶ In any event, the tax advantage of non-cash rewards diminishes as the share of cash pay goes down, since the employee's marginal tax rate on cash also declines when her cash pay drops.

It is likely that neither these arguments nor our counterarguments are wholly right, but instead present managers with sets of trade-offs. That is, if managers had complete control over their own compensation structure, their pay would represent a balancing among these factors.⁸⁷ Assuming a diminishing marginal value of cash, diminishing warm glow returns to making a charitable contribution, and a decreasing marginal tax benefit to warm glow compensation, we should expect managers to optimally select a mix of cash and other rewards. Few managers will starve or live under a bridge in order to

⁸² See Rose-Ackerman, *Altruism*, *supra* note 51, at 714 (observing that donors may lose value of giving if others perceive their actions as overly self-serving).

⁸³ JOSEPH BANKMAN ET AL., *FEDERAL INCOME TAXATION 75-76* (16th ed. 2012).

⁸⁴ Absent an explicit expenditure, simply providing a warm glow to an employee would not generate a deduction for an ordinary and necessary business expense. I.R.C. § 162(a) (2012).

⁸⁵ *But see* I.R.C. § 512 (2012) (imposing tax on unrelated business income of federally recognized nonprofits).

⁸⁶ See, e.g., Gregg D. Polsky & Brant J. Hellwig, *Examining the Tax Advantages of Founders' Stock*, 97 IOWA L. REV. 1085, 1100-15 (2012).

⁸⁷ See Handy & Katz, *supra* note 50, at 258-59, and Anne E. Preston, *The Nonprofit Worker in a For-Profit World*, 7 J. LAB. ECON. 438, 442 (1989) for formal models of how firms and managers choose between mixes of pure cash versus cash plus fringe benefits and amenities.

earn warm glow, but those that value warm glow will take some degree of a pay cut to earn it.

The pay structures preferred by organizations may not match the manager's optimum, 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. If she can't easily extract additional warm glow from the organization, her main alternative is to 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.⁸⁸ Donors' glow could depend on the manager's pay: Will other 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 feel the 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?*

As we have just set out, 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 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.⁸⁹ 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.⁹⁰ Second, the trustees are not spending their own money when

⁸⁸ Andreoni, *supra* note 77, at 464-65 (1990); Vesterlund, *supra* note 40, at 568, 572-573.

⁸⁹ ROBERT J. DESIDERIO, PLANNING TAX-EXEMPT ORGANIZATIONS § 2A.02 (2014).

⁹⁰ James J. Fishman, *Standards of Conduct for Directors of Nonprofit Corporations*, 7

they negotiate executive pay. In fact, while public company directors are increasingly compensated with equity,⁹¹ which may encourage them to think and act more like owners, nonprofit trustees can have no direct economic interest in their organizations.⁹² 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.⁹³ Other stakeholders rarely have both incentives and resources to closely monitor executive pay.⁹⁴

In fact, the agency problem is likely to be 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.⁹⁵ In the nonprofit sector, there is no market for organizational control and no such upper bound.⁹⁶ Further, the absence of a

PACE L. REV. 389, 397 (1987); *cf.* Bebchuk et al., *supra* note 15, at 772 (describing impact of similar dynamic at for-profit firms).

⁹¹ Frydman & Jenter, *supra* note 8, at 80-82.

⁹² Hansmann, *supra* note 10, 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 67, 68 (observing scarcity of compensated board members in nonprofit sector).

⁹³ *See* Avner Ben-Ner & Theresa Van Hoomissen, *The Governance of Nonprofit Organizations: Law and Public Policy*, 4 NONPROFIT MGMT. & LEADERSHIP 393, 404-05 (1994); Danné L. Johnson, *Seeking Meaningful Nonprofit Reform in a Post Sarbanes-Oxley World*, 54 ST. LOUIS U. L.J. 187, 203-04 (2009) (“It is not unusual for the incestuous director relationship, common in the for-profit sector, to be replicated on nonprofit boards . . .”); Brian G. M. Main et al., *The CEO, the Board of Directors and Executive Compensation: Economic and Psychological Perspectives*, 4 INDUS. & CORP. CHANGE 293 (1995). These close relationships may also affect the psychological and cognitive pathways that lead to effective governance. Melanie B. 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 charged with approving executive pay not have a conflict of interest, that standard ensures 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)(3) (as amended in 2011), but for many nonprofits, such as the institutions of higher education that are the focus of this study, public charity status is automatic, *see* I.R.C. § 509(a)(1) (2012), and thus this lever is unimportant.

⁹⁴ Frumkin & Andre-Clark, *supra* note 9, at 461-62, 482.

⁹⁵ Jensen & Meckling, *supra* note 7, at 352; Henry G. Manne, *Bring Back the Hostile Takeover*, WALL ST. J., June 26, 2002, at A18.

⁹⁶ Fama & Jensen, *Separation*, *supra* note 11, at 319; Rodrigues, *supra* note 10, at 1268-69. 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

market for organizational control reduces board and managerial incentives to achieve maximal cost effectiveness.⁹⁷ 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 constraints in the nonprofit sector, we would argue that the threat or reality of outrage⁹⁸ 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 the public approval aspect of 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.⁹⁹ 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.¹⁰⁰ As a result, nonprofit boards are rightly concerned "that raising [executive] salaries could tarnish a group's public image."¹⁰¹

Anecdotal evidence supports the notion that nonprofit executives and boards are sensitive to the perception of their pay practices.¹⁰² Like their for-profit

purchase the ability to direct the firm. Eleanor Brown & Al Slivinski, *Nonprofit Organizations and the Market*, in *THE NONPROFIT SECTOR: A RESEARCH HANDBOOK*, *supra* note 40, 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.

⁹⁷ Rose-Ackerman, *Altruism*, *supra* note 51, at 717.

⁹⁸ Bebchuk et al., *supra* note 15, at 786-88.

⁹⁹ See *supra* note 88.

¹⁰⁰ Cf. Rose-Ackerman, *Altruism*, *supra* note 51, at 714, 719 (positing that if donors' emotional rewards from giving decline, so do gifts, and that managers' signals 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.

¹⁰¹ 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* 167, 172-75 (Walter W. Powell ed., 1987) (stating that donors expect nonprofit managers to partially volunteer their efforts).

¹⁰² Kertz, *supra* note 9, at 820.

brethren, nonprofit executives often receive a considerable portion of their total compensation in less visible forms, such as deferred compensation and perquisites.¹⁰³ Moreover, some nonprofit executives receive only a portion of their compensation directly from their employer with the balance coming from an outside foundation.¹⁰⁴ Aside from camouflaging total compensation, it is difficult to imagine what purpose is served by splitting compensation in this way.¹⁰⁵

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 on the part of various constituencies or observers should pay less, all else equal. In the next two subparts, 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 for-profit 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

¹⁰³ ROBERT H. ATWELL & JANE V. WELLMAN, PRESIDENTIAL COMPENSATION IN HIGHER EDUCATION 2 (2000); Kertz, *supra* note 9, 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 (observing that loans with favorable terms are common in nonprofit compensation).

¹⁰⁴ Ronald G. Ehrenberg et al., *Paying Our Presidents: What Do Trustees Value?*, 25 REV. HIGHER EDUC. 15, 17 (2001); Julianne Basinger & Sarah H. Henderson, *Hidden Costs of High Public Pay*, CHRON. OF HIGHER EDUC., Nov. 14, 2003, at A3; see CHARITY NAVIGATOR, 2012 CEO COMPENSATION STUDY app. at 16 (Nov. 2012), available at http://www.charitynavigator.org/_asset_/studies/2012_CEO_Compensation_Study_Final.pdf, archived at <http://perma.cc/9DSU-T3SC> (indicating that some firms in the study pay their executives through use of multiple affiliate organizations).

¹⁰⁵ Some state institutions reportedly rely on compensation from multiple sources to avoid state-law caps on public employee salaries. Basinger & Henderson, *supra* note 104. 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 79, at 164.

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.¹⁰⁶ Referring to the comments section of its webpage, Charity Navigator notes that “[m]any donors assume that charity leaders work for free or minimal pay and are shocked to see that they earn six figure salaries.”¹⁰⁷ 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. By contrast, nonprofits with large revenues and many paying customers may look more “commercial” and therefore carry an expectation of something like market salaries.¹⁰⁸ 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 affect 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

¹⁰⁶ Regina E. Herzlinger, *Effective Oversight: A Guide for Nonprofit Directors*, HARV. BUS. REV., July 1994, at 52, 52.

¹⁰⁷ CHARITY NAVIGATOR, *supra* note 104, at 1.

¹⁰⁸ See Hansmann, *supra* note 10, at 875-76; 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.

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. Rodrigues, *supra* note 10, at 1293-1303.

compensation of private college and university presidents, donations, and various important control variables. Second, and more importantly, the agency problems at public and private universities are different. While both private and public university heads typically report to boards 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.¹⁰⁹ Either way, there is a great deal of independence. Many public university trustees are selected by state governors and other political actors.¹¹⁰ Moreover, public universities are often organized into a state system. The head of the 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.¹¹¹ 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.¹¹²

In a 2007 study, James Monks found that public university presidents earned about 50% less than their counterparts at comparable private universities.¹¹³ Monks suggested that the difference might be explained by different skill sets required in the two jobs.¹¹⁴ Public university presidents need to be skilled at managing state appropriation processes, while private university presidents need to be expert at attracting private donations.¹¹⁵ Another explanation, however, would be that the agency problem is more severe in the non-

¹⁰⁹ James O. Freedman, *Presidents and Trustees*, in GOVERNING ACADEMIA 9, 13 (Ronald G. Ehrenberg ed., 2005).

¹¹⁰ Donald E. Heller, *State Governance of Academia*, in GOVERNING ACADEMIA, *supra* note 109, at 49, 53.

¹¹¹ See, e.g., FLA. STAT. § 1012.975(2) (2013) (“[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. § 1012.975(3) (“This section does not prohibit any party from providing cash or cash-equivalent compensation from funds that are not public funds . . .”).

¹¹² 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. EDUC. REV. 105, 117-18 (2001); for a brief review of other studies, see also Ronald G. Ehrenberg, *Econometric Studies of Higher Education*, 121 J. ECONOMETRICS 19, 28-29 (2004).

¹¹³ James Monks, *Public Versus Private University Presidents Pay Levels and Structure*, 26 ECON. 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, and the like) was greater in the private university sphere.

¹¹⁴ *Id.* at 346-47.

¹¹⁵ *Id.*

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 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.¹¹⁶ 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.¹¹⁷

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.¹¹⁸

¹¹⁶ See Rodrigues, *supra* note 10, at 1295 (conceding that religious hospitals may rely more on charitable signaling because it could provide them additional benefits not available to secular competitors).

¹¹⁷ See GERALD MARWELL & PAMELA OLIVER, *THE CRITICAL MASS IN COLLECTIVE ACTION: A MICRO-SOCIAL THEORY* 7-9 (1993) (introducing claim that organizations overcome free rider problems through mutual signaling of commitment, among other factors).

¹¹⁸ For an 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*

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. 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.¹¹⁹ At least under our first and third theories of outrage, differences in schools' sources of funding should affect 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 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.

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 fundraising success. As discussed below, several possible alternative explanations seem quite unlikely.

Of course, in order for donor dependence to constrain presidential pay in the manner we have hypothesized, it must be the case that donors both care about presidential pay levels and respond, in aggregate, negatively to high

the White-Collar Nonprofit Sector: The Best Option or the Only Option?, 72 REV. ECON. & STATS. 560, 564-65 (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, 801-22 (2009).

¹¹⁹ If nonprofit employees substitute warm glow for salary, as others have suggested, see Henderson & Malani, *supra* note 10, at 583-84, they are in effect donors to the firm and should be sensitive to executive pay in the same way. See Caers et al., *supra* note 11, at 39-40 (suggesting that donor outrage could constrain executive pay). Hansmann, *supra* note 10, 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 108, at 1003-04 (suggesting that providing warm glow 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 classified as nonprofits for "historical" and tax-related reasons. Hansmann, *supra* note 10, at 866-68.

compensation. In other words, donor sensitivity is a necessary but not sufficient condition for the proposition that dependence on current donations dampens pay levels. 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,¹²⁰ we expect a negative association between pay and donations to dominate.

3. Unionization

Other factors may be present in both the for-profit and nonprofit sectors but may have differing effects 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.¹²¹ 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

¹²⁰ Although the view is not unanimous, there is evidence in the public company realm that shareholders take a dim view of high executive pay. See Marinilka B. Kimbro & Danielle Xu, *Shareholders Have a Say on Executive Compensation: Evidence from Say-on-Pay in the United States* 4 (April 1, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2209936 (finding that negative “say-on-pay” votes are associated with high levels of executive pay). Jie Cai & Ralph A. Walkling 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. Jie Cai & Ralph A. Walkling, *Shareholders’ Say on Pay: Does it Create Value?*, 46 J. FIN. & QUANTITATIVE ANALYSIS 299 (2011).

¹²¹ On the general role of employees as potential checks on managerial rent-seeking, see Caers et al., *supra* note 11, at 40-41, and Fama & Jensen, *Separation*, *supra* note 11, at 321. We find some correlation between president pay and mean faculty compensation, see *infra* Table A2, 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 costs of living and amenities.

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 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. Although 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.¹²²

A. *Sources of Data*

We explore the compensation of presidents of private colleges and universities with a sample comprising the 341 colleges and universities that appear both in annual "Private Universities" reports on president pay from the Chronicle of Higher Education ("CHE"), and in the institutional data compiled by the National Center for Education Statistics ("NCES") for each of the

¹²² 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.

eleven years between 1997 and 2008.¹²³ 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 collection and public distribution of information about institutions of higher education.¹²⁴ For interested readers, we set out summary data and additional details about the construction of our data set in a Methodological Appendix below.

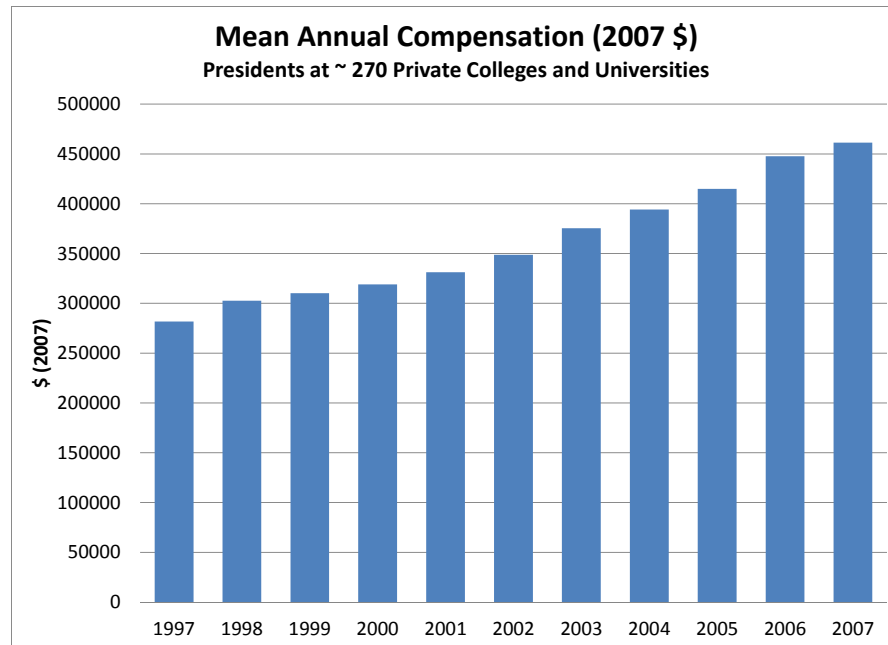
Average total reported compensation of the presidents in our sample was \$365,000 in 2007 dollars—that is, after adjusting for inflation. This average, however, masks a significant upward trend in pay levels across the period as portrayed in Figure 1a.¹²⁵

¹²³ Although our study focuses on the period 1997 to 2008, 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 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 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 & World Report* 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 chained consumer price index.

¹²⁴ *About Us*, NATIONAL CENTER FOR EDUCATION STATISTICS, archived at <http://perma.cc/Y23G-SZA6> (last visited Sept. 29, 2014).

¹²⁵ College and university presidents receiving no reported compensation are excluded from the data presented in Figure 1a.

Figure 1a

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.¹²⁶ Several studies of universities in particular similarly find that the size, complexity, and wealth of an organization predict its president's pay.¹²⁷ A number of others find that president pay is influenced by factors that could be described as measures of

¹²⁶ Core et al., *supra* note 10, at 325-26; Hallock, *supra* note 9, at 392-96; CHARITY NAVIGATOR, *supra* note 104, at 6. See also Jegers, *supra* note 10, at 151-53, for more discussion of this connection.

¹²⁷ Robin L. Bartlett & Olga Sorokina, *Determinants of Presidential Pay at National Liberal Arts Institutions*, 29 REV. HIGHER EDUC. 53, 59-65 (2005); 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 58, at 411.

success, such as selectivity, rankings, and peer assessments, though other authors find no evidence of “pay for performance.”¹²⁸ More experienced managers do earn more in studies that examine the effect of experience on pay.¹²⁹

Evidence on the questions we explore here is scant. The most similar prior effort is by Sharon Oster, who found that a university’s ability to spend out of endowment had no significant impact on presidents’ pay.¹³⁰ Oster’s results are difficult to rely on, though, 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.¹³¹ 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 with very limited institutional or personal-characteristic controls.¹³²

Two earlier papers looked for, and claimed 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 United Kingdom.¹³³ In the university setting, Mitchell Langbert and Marc 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.¹³⁴ 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.¹³⁵

We are unpersuaded by Langbert and Fox. Managerial power theorists in the

¹²⁸ Those finding evidence of a positive correlation include Bartlett & Sorokina, *supra* note 127, at 59-65; Huang & Chen, *supra* note 127, at 3036; Monks, *supra* note 113, at 344-47; Olga V. Sorokina, *Executive Compensation: The Case of Liberal Arts College Presidents*, 12 ISSUES POL. ECON., Aug. 2003, at [7-8]; Tang et al., *supra* note 58, at 411; and Rajiv D. Banker et al., *The Compensation of University Presidents: A Principal-Agent Theory and Empirical Evidence* 4 (July 23, 2009) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1444849. Those finding no link include Ehrenberg et al., *supra* note 104, at 26, 29-34, and Peter Frumkin & Elizabeth K. Keating, *The Price of Doing Good: Executive Compensation in Nonprofit Organizations* 277-80 (Hauser Ctr. for Nonprofit Orgs., Working Paper No. 8, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=292253.

¹²⁹ Bartlett & Sorokina, *supra* note 127, at 59-64.

¹³⁰ Oster, *supra* note 101, at 214.

¹³¹ *Id.* at 212-14.

¹³² *Id.* at 211.

¹³³ See *supra* notes 57-59 and accompanying text.

¹³⁴ Mitchell Langbert & Marc Fox, *The Compensation and Benefits of Private University Presidents* 13-14, 26-27 (Sept. 14, 2011) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2089641.

¹³⁵ *Id.* at 13-14.

for-profit context point out that outside hires often have greater negotiating leverage and must be paid a premium to leave their already-excellent jobs, which explains why they will often earn more than inside candidates.¹³⁶ 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 do 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.¹³⁷ Finally, we suspect that the Langbert and Fox results may be driven in part by the fact that interim presidents are typically internal hires and are paid less than permanent hires.

A few other studies also supply some relevant data. Ronald Ehrenberg and his co-authors find some evidence that successful fundraising increases a president's compensation.¹³⁸ 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.¹³⁹

In a related project, whose technical details we leave for elsewhere, we study the effect on donations of a natural experiment in which information about presidential pay is made easier for donors to obtain for an essentially random subset of presidents.¹⁴⁰ We find strong evidence that donors react negatively to news of high executive compensation: schools whose president is revealed to be among the "top ten" most highly paid receive about \$4.5 million less in donations, on average.¹⁴¹ We also find some evidence that schools respond to reduced donations by shifting revenues towards other sources. For instance, we find that presidents whose pay is disclosed subsequently allow enrollment to rise.¹⁴² In short, we find evidence that donors respond to high president pay by reducing contributions.¹⁴³ As a result, it is certainly plausible that at schools where donations contribute relatively more to overall revenues,

¹³⁶ Michael B. 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 19, at 854 (arguing that higher pay for outside hires is inconsistent with managerial power hypothesis).

¹³⁷ Treas. Reg. § 53.4958-4(a)(3)(i) (2002).

¹³⁸ Ehrenberg et al., *supra* note 104, at 29-30; Hallock, *supra* note 9, at 398.

¹³⁹ *Compare* Sorokina, *supra* note 128, at [7-8] (no relation), *with* Langbert & Fox, *supra* note 134, at 16 (weak negative relationship).

¹⁴⁰ Brian D. Galle & David I. Walker, *Sunshine, Stakeholders, and Executive Pay: A Regression-Discontinuity Approach* (Boston Coll. Law Sch. Legal Studies, Research Paper No. 316, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2363013.

¹⁴¹ *Id.* at 19-20.

¹⁴² *Id.* at 25.

¹⁴³ *Id.* at 27-28.

presidents and trustees would have a stronger incentive to hold down reported compensation.

C. New Evidence on President Pay

Like the studies described above, 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 (that is, the outcome we are measuring) 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. We control for the determinants of pay found to be important in the 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 an eleven-year period, which allows us to explore variation over time as well as variation from school to school.

The analyses present several empirical challenges. To begin, methods of computing non-salary compensation vary between organizations, and, for reasons that we discuss below, it is unlikely that the variation is random. Thus, our results are best interpreted as measuring the determinants of reported, rather than actual, compensation.¹⁴⁴

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.¹⁴⁵ This negative association is suggested by theory, and previous studies provide some support for it.¹⁴⁶ However, as prior literature also reports, boards tend to reward successful fundraisers.¹⁴⁷ 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

¹⁴⁴ We obtain qualitatively similar results when we use presidential salaries rather than total reported compensation as the dependent variable in our analyses.

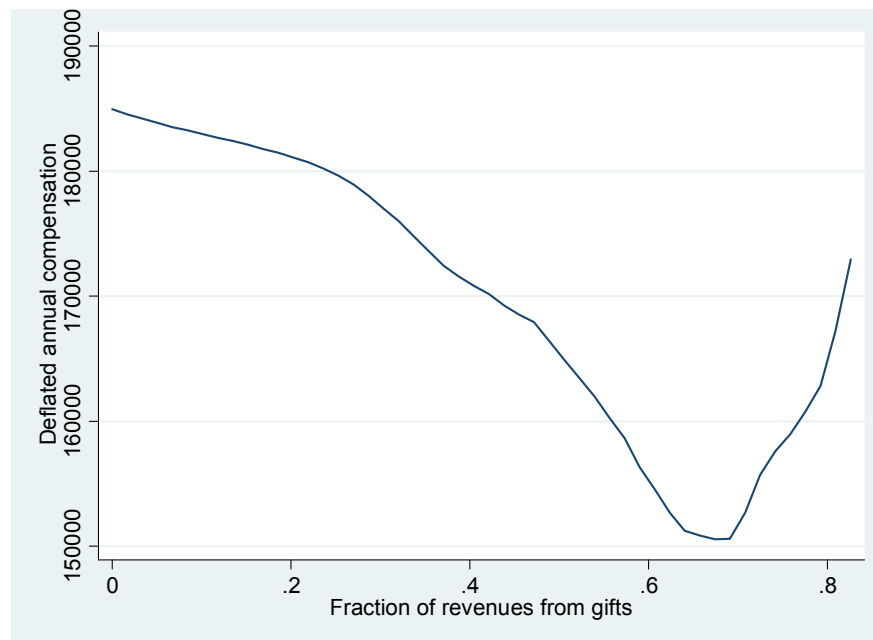
¹⁴⁵ We obtain quantitatively similar results when using alternative measures of the university's dependence on gifts, such as gifts as a percentage of expenditures or gifts per student.

¹⁴⁶ Langbert & Fox, *supra* note 134, at 16; Oster, *supra* note 101, at 214.

¹⁴⁷ Ehrenberg et al., *supra* note 104, at 29-30; Hallock, *supra* note 9, at 398.

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



Correctly identifying which factors are causing the results we measure presents 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 impact of local economic factors. In any event, all of these relationships would tend to produce a positive relationship between pay and donations. If we observe a negative relationship, we can infer that it was not likely to have been caused by these unmeasured factors; if anything, these factors would tend to obscure the negative relationship we predict. We also employ a variety of other econometric techniques 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.¹⁴⁸

Table 1: Effects of Donation-Dependence on Compensation

Variable	Coefficient
% gift	-0.752*** (-2.794)
% gift squared	1.021** (2.060)
Relig. affil.	-0.420*** (-5.114)
Staff union	.051 (.90)
Net Tuition	0.116** (2.003)
Gov't grants	.00897 (.571)

Notes: **: significant at 5% level ***: significant at 1% level; see Appendix for full results; coefficient reported with (z-score); 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 donation-dependence on presidential pay. The linear effect is negative, statistically significant, and economically substantial in magnitude. For example, the coefficient of $-.752$ for the linear percent-gift variable in our base “ordinary least squares” regression implies that a 1% increase in a university’s dependence on gifts correlates with a .75% reduction in compensation. Mean donor dependence in our sample is 17.7%, and a one standard-deviation shift is about 19.0%. This implies that the linear effect on average suppresses pay by about 27.6% for a president whose school is at the 68th percentile for donor dependence, and nearly 42% for those in the 95th percentile.

At the same time, greater donations are also associated with higher pay; the nonlinear effect was positive in sign, statistically significant, and modest in size.¹⁴⁹ As expected, we find no evidence that grants or tuition constrain

¹⁴⁸ In order to provide a sense of the variation across religious and unaffiliated universities, Table 1 reports the results of a “random effects” regression. As we show in the Appendix, we obtain very similar results using several other, similar methodologies that do not require the assumptions of the random effects model.

¹⁴⁹ Although the coefficient on the nonlinear effect is larger, the overall impact is smaller

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.¹⁵⁰ Our data confirm earlier results finding that presidents of religiously affiliated institutions receive lower average compensation¹⁵¹—about 42% less in our sample. Unionization has no significant effect.

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

D. *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, our confidence in the accuracy of the numbers is bolstered by the fact that the compensation data are drawn from federal tax returns and that willful misstatements are punishable with jail time.¹⁵² 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.¹⁵³ CHE's data for the 2009 academic year evince a larger fraction of compensation in the form of benefits than we observe in our sample, which includes data only through 2008.¹⁵⁴ In light of the empirical evidence of

because the variation in the square of donation-dependence is much less than the variation in donation-dependence. For example, a one-deviation increase in donation-dependence squared correlated with a roughly \$40,000 increase in pay.

¹⁵⁰ We treat a college or university as religiously affiliated if they check the box to indicate such an affiliation in their self-reporting to the Department of Education.

¹⁵¹ Oster, *supra* note 101, at 212, 214 (reporting lower pay at religious organizations and religious universities, though the results reported for religious universities lack statistical significance); 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).

¹⁵² I.R.C. § 7206 (2012).

¹⁵³ See Kertz, *supra* note 9, at 865-66 (observing wide inconsistencies in compensation reporting by charities); Julie L. Nicklin, *Colleges Are Evasive About Presidents' Benefits Packages*, CHRON. HIGHER EDUC., Nov. 24, 2000, at A28.

¹⁵⁴ Benefits represented 22.7% of total compensation in CHE's academic-year 2009 data,

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.¹⁵⁵

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.¹⁵⁶ That expected cost was not clearly reported during his time in office.¹⁵⁷

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.

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.”¹⁵⁸ Whether donor pressure constrains actual compensation or

while comprising between 13.4 and 17.4% of compensation over the period of our sample.

¹⁵⁵ See, e.g., Bebchuk et al., *supra* note 15, at 795-834 (providing examples of public company pay practices consistent with the managerial power view); Bebchuk & Jackson, *supra* note 17, at 832-51 (public company pensions); Walker, *supra* note 42 (stock option backdating); see also Ehrenberg et al., *supra* note 104, at 30 (reporting that universities may use deferred compensation because it is less “visible”).

¹⁵⁶ President and Fellows of Harvard College, 2010 Form 990, I.R.S. (2011), available at http://990s.foundationcenter.org/990_pdf_archive/042/042103580/042103580_201106_990.pdf, archived at <http://perma.cc/3888-ZWBN>.

¹⁵⁷ 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, 2006 Form 990, I.R.S. (2008) (compensation explanation), available at http://207.153.189.83/EINS/042103580/042103580_2006_046C7DDD.PDF, archived at <http://perma.cc/XP4U-AWGL>. The return also notes that the value of the president’s free housing is not included in the reported compensation figure. *Id.*

¹⁵⁸ Bebchuk et al., *supra* note 15, 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.

instead only distorts the form in which pay is presented, we have provided evidence that pressure from donor outrage changes agents' behavior. Likewise, evidence 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.¹⁵⁹

1. Reliance on Current Donations

With that significant caveat in mind, our finding of a negative association between president pay and the fraction of university revenue derived from current donations is consistent with the idea that the prospect of donor outrage would have a moderating influence on pay. This argument is buttressed by evidence we provide elsewhere that donors care about and respond to president pay levels.¹⁶⁰

We find alternative possible explanations for our results less persuasive.¹⁶¹ 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.¹⁶² Langbert and Fox labeled their 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.¹⁶³ We control for this possibility using research grant funding awarded to each school, Carnegie category (a descriptor for the entity's primary mission, such as “research university” or “liberal-arts college”), and *U.S. News & World Report* 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.”¹⁶⁴ 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

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.

¹⁵⁹ See *supra* notes 140-142 and accompanying text.

¹⁶⁰ See *supra* notes 140-142 and accompanying text.

¹⁶¹ 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* note 11, 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.

¹⁶² Langbert & Fox, *supra* note 134, at 16.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

coming from current donations. The theory would be 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,¹⁶⁵ 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. Finally, our results are largely unchanged if we omit presidents who are in their last year.

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. If students and parents rationally free ride in their effort at monitoring university executives, tuition dollars would be a less-constraining source of funds than many others. Or, similarly, both tuition and high president pay could be the result of high agency costs for the university’s principals.

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.¹⁶⁶ A 10% increase in pay is correlated with a 1% increase in tuition (net of financial aid). 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. Admittedly, though, a third story could be that tuition is or is perceived to be a measure of institutional quality or consumer demand, such that both high pay and high tuition are measures of presidential success. 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.

Enrollments may also be evidence of agency costs. We find here, unsurprisingly, that enrollment correlates with pay. In our parallel project we find evidence that schools whose pay practices are subjected to more scrutiny tend to increase enrollment, which in turn also increases revenues.¹⁶⁷ One interpretation of that sequence of events is that presidents are acting

¹⁶⁵ 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).

¹⁶⁶ Since we control for enrollment, our tuition findings effectively measure per-student costs.

¹⁶⁷ Galle & Walker, *supra* note 140, at 25.

defensively to protect their compensation. By shifting revenues away from dependence on donors, the president may reduce constraints on her pay. A very similar story would be that increasing the size and revenues of the school helps the president to justify her high pay. A third possibility is that the school is forced to turn to other funding to make up for shortfalls from donors. While that would not be as straightforward a manipulation of school policies for private gain, it would nonetheless represent another distortion caused by executive compensation.

2. Religious Affiliation

Consistent with the work of others,¹⁶⁸ we show that presidents of institutions with religious affiliations 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.

E. *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 1a, average university president pay climbed steadily and significantly between 1997 and 2008. 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.¹⁶⁹

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.

¹⁶⁸ See *supra* note 151.

¹⁶⁹ See Huang & Chen, *supra* note 127, at 3036, 3038-39 (explaining that public firm pay grew by 2% annually while university president compensation grew by 8% annually in real terms between 1997 and 2004 in their sample).

We note first that average tuition dollars increased by about 40% gross and 26% net 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 a rebuttable presumption that pay is reasonable under these regulations, boards must show that they obtained and relied on appropriate data in determining pay.¹⁷⁰ The process through which organizations collect and analyze pay data at peer institutions is known as *benchmarking*.¹⁷¹ It is widely suspected that the advent of benchmarking led to an upward spiral in pay levels at public companies.¹⁷² 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.¹⁷³ Moreover, as no board wants to admit that its CEO is below average, boards typically target pay levels at between the 50th and 75th percentiles of peer compensation.¹⁷⁴ 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 at private colleges and universities, sparked by the implementation of the Intermediate Sanctions regulations in 2002, contributed to greater year-on-year increases in mean pay.¹⁷⁵ Look again at the graph presented in Figure 1a and reproduced in Figure 1b. Note that the slope of a line fitted to the top of these bars tilts

¹⁷⁰ Treas. Reg. § 53-4958-6(a)(2) (2002).

¹⁷¹ 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).

¹⁷² Charles M. Elson & Craig K. Ferrere, *Executive Superstars, Peer Groups, and Overcompensation: Cause, Effect, and Solution*, 38 J. CORP. L. 487, 493 (2013). For recent evidence, see IRRIC INST. FOR CORPORATE RESPONSIBILITY, COMPENSATION PEER GROUPS AT COMPANIES WITH HIGH PAY (2010); John Bizjak et al., *Are All CEOs Above Average? An Empirical Analysis of Compensation Peer Groups and Pay Design*, 100 J. FIN. ECON. 538 (2011); Michael Faulkender & Jun Yang, *Inside the Black Box: The Role and Composition of Compensation Peer Groups*, 96 J. FIN. ECON. 257 (2010). *But cf.* Brian Cadman & Mary Ellen Carter, *Compensation Peer Groups and Their Relation with CEO Pay*, J. MGMT. ACCT. RESEARCH, Apr. 2014, at 57 (suggesting that their evidence supports a story in which selection of peer firms is mostly determined by firm size, rather than an effort to ratchet up pay).

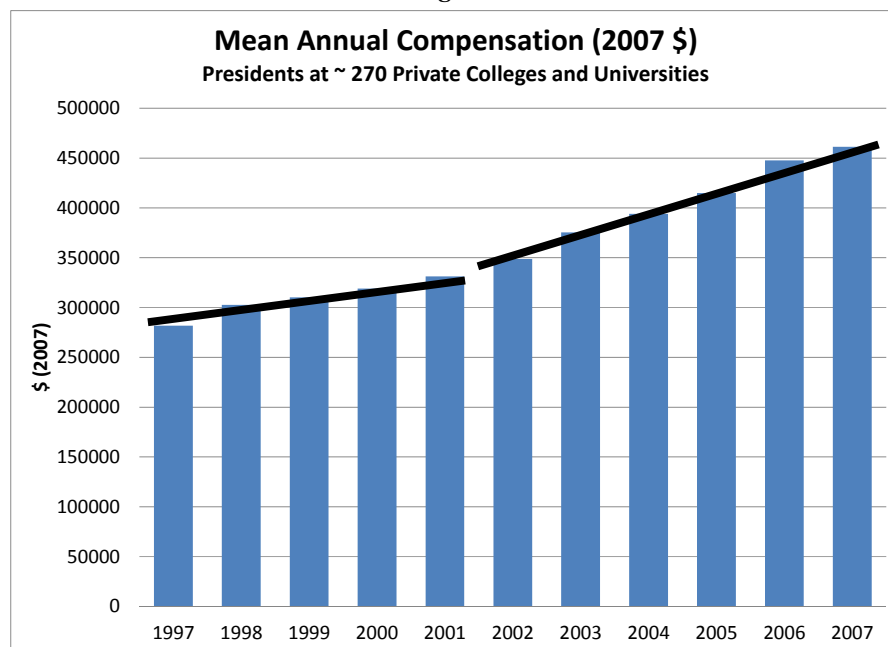
¹⁷³ *Cf.* Elson & Ferrere, *supra* note 172, at 518-19 (suggesting that peer comparisons provide boards with mental “rule of thumb” that biases pay upwards).

¹⁷⁴ *Id.* at 494-95.

¹⁷⁵ See Frumkin & Clark, *supra* note 9, at 472 (offering this hypothesis); Manny, *supra* note 68, at 736 (same).

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 significant and 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



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, reported 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

We may have shown that pay levels are higher than donors would prefer, but that is not the same as saying that they are higher than society should want. 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.¹⁷⁶ 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.¹⁷⁷ If so, then the conventional wisdom among nonprofit theorists, that principal-agent slack is pervasive in the sector, especially among large, complex organizations,¹⁷⁸ 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 multimillion 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

¹⁷⁶ We are joined in this view by commentators such as Lucian Bebchuk, *see* Lucian A. Bebchuk, Reply, *Letting Shareholders Set the Rules*, 119 HARV. L. REV. 1784, 1789 (2006); Lucian A. Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 850-51 (2005), but others would disagree. *See, e.g.*, LYNN A. STOUT, *THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HURTS INVESTORS, CORPORATIONS, AND THE PUBLIC* (2012); Stephen M. Bainbridge, Response, *Director Primacy and Shareholder Disempowerment*, 119 HARV. L. REV. 1735, 1744-51 (2006); Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 574-92 (2003).

¹⁷⁷ 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.

¹⁷⁸ Edward L. Glaeser, *Introduction* to *THE GOVERNANCE OF NOT-FOR-PROFIT ORGANIZATIONS* 1, 39 (Edward L. Glaeser ed., 2003); Frumkin & Clark, *supra* note 9, at 482; Klick & Sitkoff, *supra* note 10, at 782.

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.¹⁷⁹ 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 while at the same time de-emphasizing fundraising. Less significantly from a societal welfare perspective, presidents may attempt to camouflage compensation by shifting it into pensions, housing, foundation-based payments, and the like.¹⁸⁰ Further, in addition to depressing donations, high president pay levels may adversely affect the morale and productivity of non-executive employees in this sector.¹⁸¹

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 them¹⁸²—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 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 complete and accurate information about the organization.¹⁸³

¹⁷⁹ 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 Standard & Poor's Compustat Execucomp data, accessed July 2013. See Compustat, www.compustat.com (accessed July 2013).

¹⁸⁰ See Bebchuk & Jackson, *supra* note 17, at 832-51, for evidence in the for-profit sector.

¹⁸¹ Cf. James D. Cox, *Fair Pay for Chief Executive Officers*, in *LAW AND CLASS IN AMERICA* (Paul D. Carrington & Trina Jones eds., 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).

¹⁸² JESSE DUKEMINIER ET AL., *WILLS, TRUSTS, AND ESTATES* 785 (8th ed. 2009).

¹⁸³ As we have noted, a possible counterargument to our suggestion here is that donor outrage is inefficient in some sense. But even then, we doubt that camouflage is the best

Along these lines, recent revisions to the Form 990 Instructions, if followed closely by nonprofits, should considerably limit organizations' ability to reduce reported compensation without also diminishing its actual value.¹⁸⁴ 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.¹⁸⁵ So far, it is too early to fully assess the changes' impact. We would also recommend promulgation of rules requiring accurate reporting of free housing and transportation, regardless of whether those items are taxable as income for the president.

However, 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.¹⁸⁶ The IRS could potentially provide stronger incentives to report if the new disclosure rules were made part of the Intermediate Sanctions "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, are presumptively insulated from statutory penalties for paying or authorizing excessive compensation.¹⁸⁷ Anecdotal evidence, such as Guidestar's prominent warnings about manager-level Intermediate Sanctions penalties shown side-by-side with links for their "comparables study" service,¹⁸⁸ suggests that managers value the safe harbor, as do our findings about the effect of the 2002 final Intermediate Sanctions

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.

¹⁸⁴ 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, 197-200 (2012); James J. Fishman, *Stealth Preemption: The IRS's Nonprofit Corporate Governance Initiative*, 29 VA. TAX REV. 545, 564-78 (2010). 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 Fishman, *supra*, at 558-88; 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).

¹⁸⁵ IRS, INSTRUCTIONS FOR FORM 990 RETURN OF ORGANIZATION EXEMPT FROM INCOME TAX 30 (2012), available at www.irs.gov/pub/irs-pdf/i990.pdf, archived at <http://perma.cc/5MKV-LJKT>.

¹⁸⁶ *Id.* at 7.

¹⁸⁷ Treas. Reg. § 53.4958-6 (2002).

¹⁸⁸ See Nonprofit Compensation Solutions: Why Nonprofit Compensation Research Matters, GuideStar, <http://www.guidestar.org/rxg/products/nonprofit-compensation-solutions/index.aspx>, <http://perma.cc/U5YL-DZWS> (last visited Oct. 24, 2014).

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, a university might post prominently the actual employment agreement it signs with its president, together with calculations of the expected cost of each item.¹⁸⁹ That could help ensure that donor pressure is directed toward the actual substance of each contract, not its reporting.¹⁹⁰ In related work, we find that delays in reporting appear to result in delays in donor behavior, so contemporaneous disclosure is vital.¹⁹¹ 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 reconsidered.

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.¹⁹² Judicial deference rests on the “business judgment rule,” which reflects an assumption that boards are better informed and better able to manage the organization than most judges.¹⁹³ 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.

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 (i.e., the manager herself), judges should review those determinations much more closely and carefully than they would otherwise.

¹⁸⁹ We are grateful to Mary Bilder for this suggestion.

¹⁹⁰ 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 10, at 252-64. 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.

¹⁹¹ See Galle & Walker, *supra* note 140, at 24.

¹⁹² WILLIAM T. ALLEN ET AL., COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION 250 (3d ed. 2009).

¹⁹³ *Id.*

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 was the best policy, they could amend their bylaws 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 Robert Jackson's argument (in a parallel for-profit context) that law should stack the deck in favor of the stakeholders.¹⁹⁴

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.¹⁹⁵ In contrast, here we find straightforward evidence that dependence on donors puts pressure on universities to reduce reported presidential compensation, and elsewhere we find that contributor displeasure at high reported compensation is registered through lower donations.¹⁹⁶ 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 above, may be disinclined or unable to negotiate vigorously with their chief executives. At the very top, there is a similarity of structure

¹⁹⁴ Lucian A. Bebchuk & Robert J. Jackson, Jr., *Corporate Political Speech: Who Decides?*, 124 HARV. L. REV. 83, 103-04 (2010).

¹⁹⁵ E.g., Alex Edmans & Xavier Gabaix, *Is CEO Pay Really Inefficient? A Survey of New Optimal Contracting Theories*, 15 EUR. FIN. MGMT. 486, 494 (2009).

¹⁹⁶ See Galle & Walker, *supra* note 140.

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,¹⁹⁷ so too, many shareholders have preferences for “sustainable” or “no sweat” firms, or other markers of their ideological preferences.¹⁹⁸ Firms may donate to charity and participate in politics in part to shape their image for investors, employees, and customers.¹⁹⁹ 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 the results reported here, but would not explain evidence detailed elsewhere that donors themselves respond to compensation news.²⁰⁰

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.²⁰¹

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 and that the compensation of presidents of institutions with religious affiliations 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

¹⁹⁷ See B. Douglas Bernheim & Antonio Rangel, *Behavioral Public Economics: Welfare and Policy Analysis with Nonstandard Decision-Makers*, in BEHAVIORAL ECONOMICS AND ITS APPLICATIONS 7, 62-65 (Peter Diamond & Hannu Vartiainen eds., 2007).

¹⁹⁸ See John L. Campbell, *Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility*, 32 ACAD. MGMT. REV. 946 (2007); see also Rodrigues, *supra* note 10, at 1287-88 (comparing social meaning of participation in nonprofit and for-profit firms).

¹⁹⁹ Henderson & Malani, *supra* note 10, 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).

²⁰⁰ See Galle & Walker, *supra* note 140.

²⁰¹ *Cf.* Murphy, *supra* note 19, at 855 (“Outrage costs are critical to the [Bebchuk, Fried, and Walker] analysis....”).

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. Before embarking on wholesale regulation of higher education, reformers may wish to consider whether modestly tweaking the incentives of nonprofit executives could achieve similar goals.

METHODOLOGICAL APPENDIX

A. *Data*

As noted in the main text, our sample comprised all organizations appearing in both the CHE and NCES data for the years 1997 through 2008. Three hundred and 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 2008 to avoid changes in compensation reporting rules, as well as 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.²⁰² 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. Forty-six percent of schools are reported as having a religious affiliation.

²⁰² For example, the 2009 Form 990 for Boston College reports that the university paid over \$5 million to the Society of Jesus 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 meaningful salaries do not also compensate the leaders’ clerical order for their services.

Table A1: Descriptive Statistics

<u>Variable</u>	<u>Observations</u>	<u>Mean</u>	<u>Std. Dev.</u>
% 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.

B. *Determinants of Pay*

As described in the main text, to mitigate endogeneity concerns, we employ president fixed effects and other measures of presidential human capital.²⁰³ 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

²⁰³ 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.

compensation.²⁰⁴ Although generally system GMM is more efficient than alternatives such as Hausman-Taylor, to capture estimates of the time-invariant variables, we estimate a Hausman-Taylor regression in which we treat percent gifts and percent gifts squared as endogenous to the president fixed effects.²⁰⁵ We used Schaffer & Stillman's "xtoverid" Stata routine to obtain cluster-robust standard errors for the Hausman-Taylor regressions.

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, total assets, size of the faculty, faculty to full-time enrolled student ratio, faculty mean salary, whether the university has a teaching hospital, *U.S. News and World Report* ranking,²⁰⁶ and 75th percentile SAT scores for the entering first-year class.²⁰⁷ 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),²⁰⁸ which we expect to account for any variations in macroeconomic factors, the tax-price of giving, or major regulatory differences across time and

²⁰⁴ We obtain similar results controlling only for first or for both first and second lags of compensation.

²⁰⁵ When we double-check the Hausman-Taylor regressions using system GMM regression, we obtain similar coefficients to our reported results, but imprecisely estimated. Because system GMM relies on first differences, it does not allow us to control effectively for invariance, slightly varying, or constantly varying data, which may account for the loss of precision.

²⁰⁶ 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.

²⁰⁷ 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.

²⁰⁸ Our results are similar but less precise when university effects are included.

institutions. In combination with faculty average salary, state and year effects should also effectively control for any variations in the local cost of living.

Finally, as Olga Sorokina did in her analysis,²⁰⁹ we employ lags of all of our regressors. 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.

Our main results are reported in Table A2, below. Although results were often more precisely estimated in levels, we report in log-log form to facilitate interpretation and to account for the skewness of some variables. For ease of reading, we omit state, year, and Carnegie-category effects and most insignificant controls. Column 2 presents results from a fixed-effects (“FE”) regression. To give some sense of the impact of cross-sectional variation, we also report, in Columns 1 and 3, results from random effects (“RE”) and Hausman-Taylor (“HT”) regressions, respectively. As noted below, we double-check the RE results using methods that do not require the unrealistic assumptions underlying RE.

As we report in the main text, all three methods suggest an economically and statistically significant relation between compensation and dependence on donations. We also find in cross-sectional analyses that religiously-affiliated schools pay about 42% less; again, we omit presidents who work for free, so this represents the difference between salaried presidents at the two groups of institutions. Compensation is correlated with increases in net tuition, with a coefficient of about .1 across all the specifications, though in the fixed effects regression the effect is significant only at about the 85% level.

²⁰⁹ Sorokina, *supra* note 128, at 4.

Table A2

VARIABLES	(1)	(2)	(3)
	RE	FE	HT
% revenue from gifts	-0.752*** (-2.794)	-0.745*** (-2.718)	-0.819*** (-2.860)
% revenue from gifts sq.	1.021** (2.060)	0.975* (1.925)	1.154** (2.065)
Religious Affiliation	-0.420*** (-5.114)		-0.411*** (-6.062)
Net tuition	0.116** (2.003)	0.0866 (1.453)	0.108** (2.424)
Gov't grants	.00897 (.571)	.00408 (.827)	.00634 (.605)
Total revenues	0.0254 (0.494)	0.0338 (0.570)	0.0111 (0.218)
Assets	0.0673 (1.007)	0.0275 (0.230)	0.0785* (1.768)
Years in office	0.0166* (1.951)	0.0180** (2.092)	0.0166** (2.355)
Investment return	-0.00466 (-0.354)	-0.00422 (-0.298)	-0.00500 (-0.393)
Total liabilities	-0.00607 (-0.142)	0.0234 (0.445)	-.007 (-.22)
Enrollment	0.151** (2.303)	0.118 (1.360)	0.159*** (2.892)
Mean other-president pay	0.462** (2.118)	0.504** (2.255)	0.461** (2.574)
Faculty avg salary	0.345** (2.513)	0.226 (1.456)	0.347*** (2.838)
R-squared	.456	0.254	

Notes: Column 1: random effects regression. Column 2: fixed effects regression. Column 3: Hausman-Taylor regression. Coefficients reported with (z-score). Robust standard errors clustered by president. All regressors are lagged one year. Regressions include controls for 75th-percentile SAT score, student:faculty ratio, graduation rate, and year fixed effects. Columns 1 and 3 include Carnegie category and state fixed effects. *: statistically significant at the 10% level; **: statistically significant at the 5% level; ***: statistically significant at the 1% level. N: 2,198.

C. *Robustness Analysis*

As an additional check, we also use 2SLS to include several different instruments for donation-dependence. For example, we use state-level “tax price of giving,” a measure of the total tax subsidy for charitable donations, as an instrument for donations to each institution.²¹⁰ In some specifications, we also include, as a second instrument, fundraising expenditures, which are strongly correlated with donations, but have no obvious causal connection to executive compensation.²¹¹ In all cases, we use squares of the IV variables to instrument for percent-gifts squared.

While our instrumental variable results are similar in sign to those reported, their magnitude is large enough to raise questions about whether they are meaningful. We obtain coefficients about seven to ten times larger than those reported, bigger than any plausible relationship could be. Inflated coefficients are commonly observed when there is some causal relationship between the supposedly exogenous instruments and the dependent variable. Thus, we doubt the 2SLS results provide much support for our findings.

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.”²¹² GEE does not require any assumptions about the relationship between the individual effect and the other regressors, and for our purposes its results can be interpreted similarly to OLS. We obtain essentially identical results using either RE or GEE.

²¹⁰ Our tax price data derive from computations described in Jon Bakija, *Tax Policy and Philanthropy: A Primer on the Empirical Evidence for the U.S. and Its Implications*, SOCIAL RESEARCH: AN INTERNATIONAL QUARTERLY web app., June 2013, available at <http://web.williams.edu/Economics/wp/Bakija-Tax-Policy-and-Philanthropy-Web-Appendix.pdf>, archived at <http://perma.cc/7QUR-P2W7>. We are grateful to Bakija to sharing his calculations with us.

²¹¹ 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.

²¹² See Joseph C. Gardiner et al., *Fixed Effects, Random Effects, and GEE: What Are the Differences?*, 28 STAT. IN MED. 221, 227-39 (2009), for an overview of the tradeoffs between the RE and GEE models.