

The Paradox of Executive Compensation Regulation

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I. INTRODUCTION

Executive compensation stands apart from the dreary other topics in corporate law. It is a perennial flashpoint in American politics and a constant—and elusive—target of public regulation. Two broad normative critiques fuel this dogged focus on executive pay, one focused on financial incentives, and the other on progressive morality. These two camps make common cause in regulating executive compensation because they share the belief that the status quo is defective. Their regulatory ambitions have been regarded as compatible, if not complementary. But in this Article we demonstrate that the policies that flow from these two critiques work at cross-purposes, revealing a paradox in the regulation of executive compensation.

The two schools of thought on executive compensation reform are starkly different. The first takes as its touchstone that executive pay should be aligned with performance. Pay practices can and should be used to promote the interests of stockholders in controlling the agency costs at public firms. CEOs whose companies perform well should be paid handsomely, and those whose companies falter should earn less. The absolute level of pay is not relevant. The second critique of executive compensation is rooted in economic justice: absolute levels of CEO pay are obscenely high and should be curbed through regulation.

The fingerprints of both approaches are evident in the regulatory mandates of Dodd-Frank. Two of its corporate governance provisions require that firms disclose information on the linkage between pay and performance and, also, that firms hold stockholder votes on executive compensation.¹ These policies are products of the agency costs tradition.

A different part of Dodd-Frank—section 953(b)—requires a disclosure that has attracted an enormous amount of attention. This is the so-called median pay ratio disclosure requirement, forcing companies to compute and disclose the ratio of the CEO's total compensation to the compensation of the firm's median employee. This disclosure requirement has provoked the ire of business groups,² and the House of Representatives has introduced legislation to repeal it three times.³ After years of turmoil at the SEC, the rules went into effect only in the 2018 proxy season—eight years after the passage of Dodd-Frank. The criticism of section 953(b) has focused on its high costs—the SEC estimated issuers would spend \$1.3 billion to collect and analyze the data necessary to compute the ratio—while the information disclosed is not obviously useful to investors. The SEC itself had trouble identifying intended benefits from the provision.⁴

1. *See infra* notes 20–56.

2. The U.S. Chamber of Commerce, for example, has noted that “[o]f the many misguided corporate governance provisions included within Dodd-Frank, the CEO pay ratio disclosure rule stands out for its audacity.” Letter from Thomas Quaadman, Exec. Vice President, Ctr. for Capital Mkt. Competitiveness, to Brent Fields, Sec’y, SEC (Mar. 23, 2017), <https://www.centerforcapitalmarkets.com/wp-content/uploads/2017/03/Chamber-of-Commerce-Comment-on-Pay-Ratio-Rule-2017.3.23.pdf>.

3. *See infra* note 40. The provision remains in the cross-hairs: One major law firm advised clients that section 953(b) is “near the top of the list of executive compensation provisions targeted for repeal by the Republican-controlled Congress and many individuals with influence within the Trump transition team.” *Predictions on Possible Changes to and Timing of the Dodd-Frank Executive Compensation Provisions*, DAVIS POLK 1 (Dec. 12, 2016), https://www.davispolk.com/files/2016-12-12_predictions_possible_changes_timing_dodd-frank_executive_compensation_provisions.pdf.

4. Pay Ratio Disclosure, Exchange Act Release No. 33-9452, at 85 (Sept. 18, 2013) (“[N]either the statute nor the related legislative history directly states the objectives or intended benefits of the provision or a specific

The objective behind section 953(b) is not difficult to discern, however. It has nothing to do with aiding investors, and this is perhaps why it provokes so much controversy. As its supporters have acknowledged, section 953(b) is designed to shame companies that pay their CEOs “too much” and their line employees “too little.”⁵ The resulting ratio is sensational, and the intended effect is to constrain absolute levels of compensation.

Section 953(b) is a product of the social justice critique and has no connection to the extensive literature on executive compensation in law and finance. Among scholars of law and finance, the debate is principally over how best to promote stockholder welfare through executive compensation and which among competing proposals best fulfills that goal. The arguments behind section 953(b) are the kind that come chiefly from progressive policy reformers and labor activists, and financial economists and corporate law scholars have little to say on the topic.

The disjunction between section 953(b) and academic opinion in law and finance on executive compensation offers a unique opportunity to examine how laypeople think about compensation and its regulation. Lay opinion is interesting for two reasons. First, lay opinion may differ substantially from specialist opinion on executive compensation. In particular, we hypothesize that laypeople do not care about performance but instead are sensitive to absolute pay levels. A focus on absolute levels of compensation is a common theme in news coverage and editorials, and decrying the pay of public company CEOs is an issue that commands bipartisan support.⁶

Second, lay opinion is important because it shapes the preferences of elected officials. Executive compensation is unique among corporate law topics in that it is highly salient. Thus, lay opinion will be especially influential in determining how elected policymakers approach the issue. Lay opinion shapes public regulation, and public regulation—particularly at the federal level—lays an increasingly heavy hand on the governance of public companies.

In this Article, we report on psychological experiments designed to gauge how laypersons think about executive compensation and how section 953(b) may influence their analysis. We find laypeople are not sensitive to performance in their reactions to compensation information. When presented with the median pay ratio as required by section 953(b), the effect of performance disappears altogether. In other words, the pay ratio disclosure crowds out any effect of performance in the reactions of laypersons.

We reveal a paradox in the public regulation of executive compensation. The two normative objectives may in fact work at cross-purposes with each other, and yet executive compensation reform (like Dodd-Frank) may only happen when the two join forces. This suggests two direct implications. First, on the particulars of Dodd-Frank, it seems unlikely that there is an easy solution. One approach would be to repeal section 953(b), as business-oriented groups have been attempting to do. That ought to be an attractive option for the law and finance academics, as it would better promote their goal of aligning pay and performance. But that would roll back a legislative victory for the progressive reformers,

market failure, if any, that is intended to be remedied[.]”).

5. Letter from Miles Rapoport, President, Demos, to Elizabeth M. Murphy, Sec’y, SEC (Nov. 22, 2013), <https://www.sec.gov/comments/s7-07-13/s70713-384.pdf> (“The SEC’s proposed disclosure mandate is valuable and necessary in that its implementation evidences government’s recognition of the dangers of disparity in gross pay strata. . . . If used effectively, compensation committees will use CEO pay ratio data to better moderate pay packages and reduce this hazard.”).

6. *See infra* notes 8–19.

who may not care about the pay-performance link and would fight to protect section 953(b).

Another implication is the possibility of a one-way ratchet in the regulation of executive compensation. If support for the agency costs approach is as weak as our results here indicate, the prospect for reform along those lines appears starkly limited unless that reform effort is joined by the forces of progressive reform. That might mean there would only be support for aligning pay and performance on the downside—that is, only when it has the effect of limiting executive pay. Ensuring public company compensation practices are sufficiently responsive in conditions of high performance may require policies that arise in some other way, if they arise at all.

One final implication we consider is that our findings have indicated a potential oversight by many law professors and financial economists who focus on executive compensation. In debates with each other, they may win a particular skirmish over which compensation practices best align pay with performance. But they may have lost the war over what broad normative framework to apply to executive compensation in the first place. Law professors and financial economists have devoted themselves to what amounts to an internecine debate, focused specifically on what executive compensation structure most effectively ties pay to performance. Those in that debate may be well-advised to devote at least as much attention to the question of why pay should be aligned with performance in the first place. In particular, critics of executive compensation practices from the incentive-alignment tradition should be more forceful in public debate about why politicians and voters should not care about absolute pay levels or the median pay ratio.

II. THE PAY RATIO DISCLOSURE AND ACADEMIC DEBATES OVER EXECUTIVE COMPENSATION

The pay ratio disclosure in Dodd-Frank is one of the bill's most controversial provisions. The main debate in corporate governance is *how best* to align CEO incentives with those of shareholders, while the policy issue reflected in the pay ratio disclosure is *whether* to pursue such an alignment at all. Section 953(b) has attracted dedicated repeal efforts, but at the same time it has received consistent support from politicians.

A. The Academic Debate Over Executive Compensation

In the law and finance literature, there is an extensive debate about executive compensation at public companies.⁷ In that debate, the disagreement is over whether existing pay arrangements tie pay to performance. On one side, for example, Lucian Bebchuk and Jesse Fried argue the system of setting pay at public companies is fundamentally broken because CEOs have too much power over board members with whom they putatively negotiate.⁸ CEOs wield their influence to increase their pay packages and to make pay insensitive to performance. On the other side of the debate are those who

7. See Stephen M. Bainbridge, *Dodd-Frank: Quack Federal Governance Round II*, 95 MINN. L. REV. 1779, 1809 (2011) (noting “[t]he literature on this topic is immense” and “claims are highly contested”); Jeffrey N. Gordon, *Executive Compensation: If There's a Problem, What's the Remedy? The Case for "Compensation Discussion and Analysis"*, 30 J. CORP. L. 675, 675 (2005) (stating that compensation levels “have triggered an intense debate”).

8. LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* 25–27 (2004).

believe compensation committees—populated by independent directors—can negotiate at something close to arm’s-length with CEOs.⁹ Proponents of this view argue the pay of CEOs is correlated with performance¹⁰ and the rising salaries for CEOs and other executives is simply a function of the growing demand for their services.¹¹

Despite their intense disagreement about current practice, both sides of the debate agree on the appropriate way to evaluate executive compensation: an agency costs model that seeks to align the interests of executives with those of stockholders.¹² The sole normative criterion for evaluating a compensation arrangement is whether executive pay is tied to firm performance,¹³ and the absolute level of executive compensation is irrelevant.¹⁴ Even Bebchuk and Fried are indifferent to pay levels: “We would accept compensation at current or even higher levels as long as such compensation, through its incentive effects, actually serves shareholders.”¹⁵ While some academics may in fact care about the absolute level of executive compensation,¹⁶ that position has no adherents in the mainstream debate.¹⁷

This normative framework lies behind parts of Dodd-Frank’s provisions relating to executive compensation.¹⁸ For example, section 951 of the Dodd-Frank Act requires companies to hold periodic advisory votes on executive compensation, a proposal that had been promoted in various forms for years prior. Section 953(a) of Dodd-Frank also requires

9. Steven N. Kaplan, *Are U.S. CEOs Overpaid?*, 22 ACAD. MGMT. PERSP. 5, 10 (2008) (“[T]he preponderance of the evidence points toward market forces as the driver of high CEO pay.”).

10. *Id.* at 14 (“There can be no doubt that the typical CEO in the United States is paid for performance.”).

11. Kevin J. Murphy & Ján Zábajník, *Managerial Capital and the Market for CEOs* 18–19, 28 (Apr. 2007) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=984376 (noting that recent CEO pay increases are “consistent with competition” in the market for managerial talent).

12. David I. Walker, *The Law & Economics of Executive Compensation: Theory & Evidence*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW 232, 234 (2012) (“Managerial agency costs lie at the heart of executive compensation theory.”); Victor Fleischer, *Regulatory Arbitrage*, 89 TEX. L. REV. 227, 278 (2010) (“Both the legal and finance literature generally assume that executive compensation is designed to minimize agency costs between managers and shareholders.”).

13. Leo E. Strine, Jr., *Can We Do Better by Ordinary Investors? A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law*, 114 COLUM. L. REV. 449, 480 (2014) (“[O]ceans of ink have been spilled on making sure that the managers of listed corporations are paid in a manner that is linked to the performance of their companies’ stock price . . .”).

14. Andrew C.W. Lund, *Compensation as Signaling*, 64 FLA. L. REV. 591, 598 (2012) (“[T]he most prominent treatments of executive compensation primarily concern themselves with the extent to which pay structure can minimize or, in the alternative, reflect agency costs arising from the separation of residual claim ownership from corporate control. Pay level is almost always a second order concern, implicitly or explicitly.”).

15. BEBCHUK & FRIED, *supra* note 8, at 8..

16. *E.g.*, Brett H. McDonnell, *Two Goals for Executive Compensation Reform*, 52 N.Y.L. SCH. L. REV. 585, 586 (2008) (“I suggest that corporate law scholars do not have a good basis for completely ignoring inequality as a major social concern. I believe that reducing inequality is an important social goal and advocate using policies that attempt to reduce inequality to help guide our regulation of executive compensation.”).

17. William Bratton, *The Academic Tournament Over Executive Compensation*, 93 CAL. L. REV. 1557, 1559 (2005) (reviewing BEBCHUK & FRIED, *supra* note 8) (“All parties disassociate themselves from complaints about the level of management compensation The debate over *Pay Without Performance*, then, amounts to an intra-familial quarrel within the group that posits shareholder value maximization as the firm’s objective. Those who view firms’ core objectives differently, favoring stakeholder capitalism or the harmonization of the firm’s financial reward system with that prevailing in outside society, will find no allies on either side.”).

18. Steven A. Bank & George S. Georgiev, *Paying High for Low Performance*, 100 MINN. L. REV. HEADNOTES 14, 15 (2016) (“[T]he Dodd-Frank Act of 2010 aimed to embed the ‘pay for performance’ mantra firmly into federal law.”).

each public company to explain clearly the relationship between executive pay and firm performance.¹⁹

B. The Pay Ratio Disclosure

Outside of the academy, however, a different critique of executive compensation has purchase. Although corporate law may generally have no salience with the public,²⁰ executive compensation is a striking exception.²¹ News coverage of executive pay packages predictably follows proxy disclosures, as does a great deal of hand-wringing in the media and among politicians.²² For example, research on media reports of executive compensation has shown coverage is driven by absolute levels of compensation.²³ In political and editorial discourse, the absolute level of compensation figures far more prominently than the pay-performance link.²⁴ Senator Carl Levin of Michigan noted in a letter to the SEC that “[e]xcessive executive compensation is an ongoing outrage.”²⁵ Republicans and Democrats alike have inveighed against pay packages that dwarf the pay of rank-and-file workers.²⁶ This impulse has appeared in prior federal regulations of executive pay. For example, section 402(a) of the Sarbanes-Oxley Act of 2002 prohibited loans to executives from corporations, despite the usefulness of such loans in aligning executives’ interest with stockholders.²⁷

Section 953(b) of Dodd-Frank is premised directly on this critique. The provision requires companies to compute and disclose the ratio between the compensation of the CEO and the compensation of the company’s median employee.²⁸ There was no legislative history on the provision and, thus, no indication of what Congress might have hoped to achieve with it.²⁹ Former SEC Commissioner Michael Piwowar, for example, protested

19. Wall Street Reform and Consumer Protection (Dodd-Frank) Act § 953, 15 U.S.C. § 78n(i) (2010).

20. ROBERTA ROMANO, *THE GENIUS OF AMERICAN CORPORATE LAW* 50 (1993) (“[C]orporate law problems are not salient issues for the voting public.”).

21. Robert J. Rhee, *Intrafirm Monitoring of Executive Compensation*, 69 VAND. L. REV. 695, 706 (2016) (“[E]xecutive compensation is squarely in the realm of public discourse.”).

22. E.g., Gretchen Morgenson, *An Unstoppable Climb in C.E.O. Pay*, N.Y. TIMES (June 29, 2013), <https://www.nytimes.com/2013/06/30/business/an-unstoppable-climb-in-ceo-pay.html>.

23. John E. Core et al., *The Power of the Pen and Executive Compensation*, 88 J. FIN. ECON. 1, 1 (2008).

24. E.g., Editorial Board, *Exposing the Pay Gap*, N.Y. TIMES (Sept. 24, 2013), <https://www.nytimes.com/2013/09/25/opinion/exposing-the-pay-gap.html> (“In recent decades, changing corporate norms have allowed C.E.O. compensation over all to balloon to nearly 300 times what typical employees make. Company-specific data on pay gaps will force chief executives and their boards to justify just how out of kilter pay scales have become.”).

25. See Letter from Sen. Carl Levin, Chairman, Permanent Subcomm. on Investigations, to Elizabeth M. Murphy, Sec’y, SEC (Nov. 18, 2010), <http://sec.gov/comments/s7-31-10/s73110-54.pdf>.

26. See *Empowering Shareholders on Executive Compensation: HR 1257, The Shareholder Vote on Executive Compensation Act*, Hearing Before the H. Comm. Fin. Servs., 110th Cong. 3 (2007) (remarks of Rep. Spencer Bachus (R-AL)) (noting a “concern among the American people about the level of executive pay” and a sense that “the average employee is not being taken care of”); *id.* at 4 (remarks of Rep. David Scott (D-GA)) (lamenting executives who have “clearly, quite honestly, obscene pay packages of \$2-, \$3-, or \$400 million, when the average rank-and-file worker in our system is not making a sufficient amount of money to actually provide for his day-to-day care”).

27. See Roberta Romano, *The Sarbanes-Oxley Act and the Making of Quack Corporate Governance*, 114 YALE L.J. 1521, 1539 (2005).

28. Wall Street Reform and Consumer Protection Act, Pub L. No. 111-203, § 953(b), 124 Stat. 1376 (2010).

29. H.R. REP. NO. 114-504, at 1–2 (2016) (“The disclosure requirements imposed by Section 953(b) of the

that the statute and the associated rules had nothing to do with the SEC's traditional mandate.³⁰ This requirement seems wholly divorced from any attempt to link pay and performance but is instead designed to constrain the absolute level of pay.

To many, public company executive compensation is a battleground for contemporary debates about income inequality.³¹ Steven Davidoff Solomon observed that the motivation behind section 953(b) was "to shame companies that had excessively high executive compensation to either pay their chief executives less or their workers more."³² A study often cited in the media found CEOs in 1965 earned 20 times a worker's compensation and that figure had grown by 2013 to approximately 300 times.³³ The *New York Times* columnist Gretchen Morgenson suggested the effect of the section 953(b) disclosures will constrain absolute levels of pay by embarrassing or shaming boards and CEOs:

Because the rule will generate an easily graspable and often decidedly shocking number, it may energize a cadre of new combatants in the executive pay fight. And because these newcomers[—]company employees, state governments and possibly even consumers[—]will most likely be more vocal on the matter than institutional investors have been, the executive pay bubble might actually start to deflate.³⁴

The provision has vocal detractors, as described below, but the comments received by the SEC and the supportive statements from politicians suggest it has traction with a substantial portion of lay persons.³⁵

C. The Critique of the Pay Ratio Disclosure

The only attention given to section 953(b) at the time of its adoption was skeptical,³⁶

Dodd-Frank Act originated in the Senate, and were neither discussed nor debated during the Conference Committee's deliberations on the legislation. The legislative history and the Dodd-Frank Act itself are both silent with respect to the purported purpose of the pay ratio rule. This silence is not surprising as Congress did not hold any hearings on Section 953(b) prior to its inclusion in the Dodd-Frank Act.").

30. Michael S. Piwowar, Comm'r, SEC, Dissenting Statement at Open Meeting on Pay Ratio Disclosure (Aug. 5, 2015), <https://www.sec.gov/news/statement/dissenting-statement-at-open-meeting-on-pay-ratio-disclosure.html> ("Section 953(b) of Dodd-Frank simply has nothing to do with protecting investors, ensuring fair, orderly, and efficient markets, or facilitating capital formation.").

31. Bank & Georgiev, *supra* note 18, at 20 ("It appears that, at least in part, the animating force behind the rule was a concern about growing income inequality . . .").

32. Steven Davidoff Solomon, *A Simple Solution that Made a Hard Problem More Difficult*, N.Y. TIMES: DEALBOOK (Aug. 27, 2013), <https://dealbook.nytimes.com/2013/08/27/a-simple-solution-that-made-a-hard-problem-more-difficult/>.

33. LAWRENCE MISHEL & ALYSSA DAVIS, ECON. POL'Y INST., ISSUE BRIEF #380: CEO PAY CONTINUES TO RISE AS TYPICAL WORKERS ARE PAID LESS 2 (2014), <https://www.epi.org/files/2014/ceo-pay-continues-to-rise.pdf>.

34. Gretchen Morgenson, *Why Putting a Number to C.E.O. Pay Might Bring Change*, N.Y. TIMES (Aug. 6, 2015), <https://www.nytimes.com/2015/08/09/business/why-putting-a-number-to-ceo-pay-might-bring-change.html> [hereinafter Morgenson, *Putting a Number to C.E.O. Pay*].

35. Rob Tricchinelli, *Senate Democrats Urge SEC to Finalize CEO Pay Ratio Rule in First Quarter of 2015*, BLOOMBERG LAW (BNA) (Dec. 19, 2014), <https://www.bna.com/senate-democrats-urge-n17179921201/>.

36. See 156 CONG. REC. S4075 (daily ed. May 20, 2010) (statement of Sen. Richard Shelby (R-AL)) ("The grab bag includes puzzling items, like a provision that would create a redundant office at the SEC and another provision that requires disclosure of the ratio of the median employee's compensation to the chief executive officer's compensation. It looks to me like the way is being paved to achieve so-called 'social justice' in income distribution. This is another disturbing example of the government getting its nose under the private sector's

and the provision has attracted consistent and increasingly intense criticism since its adoption. Section 953(b) and other mandates in federal statutes have been the target for critics, who deride them as quack corporate governance.³⁷ The impulse to constrain pay has itself drawn attack. The financial economist Kevin Murphy, for example, has argued “a substantial force motivating such uninvited critics is one of the least attractive aspects of human beings: jealousy and envy.”³⁸ This motivation strikes Murphy as a policy mistake because it fails to promote shareholder value.³⁹

One front in the criticism of section 953(b) was directed toward the SEC during its process of drafting rules for the pay ratio disclosure. Another front was the hope of legislative repeal. Bills to repeal section 953(b) have been introduced in the House of Representatives three times, but none have ever been passed by the House.⁴⁰ The most recent bill was approved by the House Committee on Financial Services by a 32-25 vote in September 2015, with only Republicans voting in favor of the bill and only Democrats voting against it.

The twin grounds for the criticisms of section 953(b) are the costs of compliance for issuers and the immateriality of the information for investors.⁴¹ As the House Committee Report noted, “[i]t is difficult to believe that the vague, potential benefits posited by the final rule outweigh the estimated compliance costs.”⁴² Despite the straightforward nature of the ratio itself, the analysis each company is required to prepare is costly. Some companies have employees around the world, and those workers are often employed by separate subsidiaries with distinct pay practices. Moreover, many firms employ workers on a seasonal basis. As a result, computing the total compensation figure for the median employee of the public company can require substantial effort. The U.S. Chamber of Commerce, for example, calculated that the annual compliance cost would be \$710 million.⁴³ The SEC’s official estimates were slightly different, pegging the upfront compliance costs at \$1.3 billion,⁴⁴ and the annual costs at \$526 million.⁴⁵

tent.”).

37. Bainbridge, *supra* note 7, at 1797–98 (examining section 953(b) specifically); Romano, *supra* note 27, at 1521.

38. Kevin J. Murphy, *The Politics of Pay: A Legislative History of Executive Compensation*, in RESEARCH HANDBOOK ON EXECUTIVE PAY 11, 12 (Randall S. Thomas & Jennifer G. Hill eds., 2012).

39. *Id.* at 12 (“A larger part of the problem is that the regulation is often mis-intended. The regulations are inherently political and driven by political agendas, and politicians seldom embrace ‘creating shareholder value’ as their governing objective.”).

40. Burdensome Data Collection Relief Act, H.R. 414, 114th Cong. (2015); Burdensome Data Collection Relief Act, H.R. 1135, 113th Cong. (2013); Burdensome Data Collection Relief Act, H.R. 1062, 112th Cong. (2011).

41. *See, e.g.*, Letter from R. Bruce Josten, Exec. Vice President, Government Affairs at U.S. Chamber of Commerce, to U.S. Rep. Bill Huizenga and U.S. Rep. Scott Garrett (May 20, 2013), https://www.centerforcapitalmarkets.com/wp-content/uploads/2013/08/2013-5.20-HR1135_BurdensomeDataCollectionReliefAct_Huizenga_Garrett.pdf (The U.S. Chamber of Commerce has suggested that section 953(b) “fail[s] to convey relevant information to investors and impose[s] costly burdens on companies” are for that reason is “antithetical to productive capital formation.”).

42. H.R. REP. NO. 114-504, at 3 (2016).

43. IKE BRANNON, CTR. FOR CAP. MKTS. COMPETITIVENESS, THE EGREGIOUS COSTS OF THE SEC’S PAY-RATIO DISCLOSURE REGULATION 7 (May 7, 2014), <https://www.uschamber.com/sites/default/files/documents/files/Egregious-Cost-of-Pay-Ratio-5.14.pdf>.

44. Pay Ratio Disclosure, Exchange Act Release No. 33-9877, 2015 WL 4929876, at 202 (Oct. 19, 2015).

45. *See id.* at 204–05 (“[T]he median of the estimates provided by the[] commenters (40%) yield[ed] an

Critics contend the CEO-worker pay ratio is of no use to investors.⁴⁶ Identifying any benefits from the provision has been a challenge even for the SEC, which observed that “neither the statute nor the related legislative history directly states the objectives or intended benefits of the provision or a specific market failure, if any, that is intended to be remedied.”⁴⁷ Some supporters of section 953(b) have pointed to vague benefits for investors, such as allowing between-firm comparisons of pay and wages.⁴⁸ But the predominant view is that “companies are likely to spend millions for something that is likely to do nothing.”⁴⁹

D. The Demand for the Pay Ratio Disclosure

When the critics focus on the benefits of section 953(b), they focus narrowly on benefits *to investors*. But the most concrete beneficiaries of the bill are those who hope to alter absolute levels of CEO pay. As one activist observed: “Everybody is outraged about C.E.O. pay, but people feel they can’t do anything about it What I’m hoping is that this will give people something to do about it that’s concrete.”⁵⁰ Senator Robert Menendez of New Jersey, who inserted the language of section 953(b) into Dodd-Frank, has argued the benefits of section 953(b) will accrue not to investors but to society more generally because it will produce pressure at the margin to increase worker pay and decrease CEO pay.⁵¹

A firm’s ratio may impact its relationship with stakeholders beyond investors. For example, the ratio may generate discontent among employees,⁵² and it may also have effects on consumer behavior, as research has shown consumers have a preference for firms with lower ratios.⁵³

The CEO-worker pay ratio has already begun to figure in policy debates at the state and local level about income inequality. In Portland, Oregon, for example, the City Council

ongoing compliance cost of approximately \$526 million per year.”).

46. Quaadman, *supra* note 2, at 3 (“This rule, however, imposes substantial costs on affected registrants without providing any corresponding benefits. Indeed, it provides no material information to investors.”).

47. Pay Ratio Disclosure, Exchange Act Release No. 33-9452, 2013 WL 5561098, at 85 (Sept. 18, 2013).

48. Daniel F. Pedrotty, AFL-CIO, *Why CEO-to-Worker Pay Ratios Matter to Investors*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Aug. 11, 2011), <https://corpgov.law.harvard.edu/2011/08/11/why-ceo-to-worker-pay-ratios-matter-to-investors/> (“[D]isclosure of CEO-to-worker pay ratios will permit investors to compare the employee compensation structures of companies over time and to their competitors. Such disclosure will provide valuable information about which companies are investing in their human capital, an increasingly important contributor to shareholder value.”).

49. Solomon, *supra* note 32.

50. Morgenson, *Putting a Number to C.E.O. Pay*, *supra* note 34 (quoting Sarah Anderson of the Institute for Policy Studies).

51. See Menendez Calls on SEC to Expedite Adoption of CEO-to-Median Pay Disclosure Rule, BOB MENENDEZ FOR NEW JERSEY (Mar. 12, 2013), <https://www.menendez.senate.gov/news-and-events/press/menendez-calls-on-sec-to-expedite-adoption-of-ceo-to-median-pay-disclosure-rule> (“[B]y requiring companies to disclose just how much, and how skewed, CEO pay can be, there’s a strong possibility they’ll think more about their compensation structures Income inequality is a real, growing concern in our nation, as it should be. We have middle class Americans that have gone years without seeing a raise, while CEO pay is soaring . . .”).

52. Morgenson, *Putting a Number to C.E.O. Pay*, *supra* note 34 (quoting Charles Elson) (“The pay ratio was designed to inflame the employees . . .”).

53. Bhavya Mohan et al., *Consumers Avoid Buying from Firms with Higher CEO-to-Worker Pay Ratios*, 28 J. CONSUMER PSYCHOL. 344, 344–45 (2018).

approved a tax on companies with a ratio over 100. According to Thomas Piketty, a noted authority on income inequality, the Portland tax “is certainly part of the solution,” but he indicated he would go further: “the threshold ‘100 times’ should be substantially lowered.”⁵⁴ In Rhode Island, state senators introduced a bill that would give preference in awarding state contracts to firms with low pay ratios.⁵⁵ In California, a bill was introduced into the state senate that would raise the state income tax for companies with ratios over 400 and lower the tax for companies with ratios less than 25.⁵⁶

III. AN EXPERIMENTAL EXAMINATION OF THE PAY RATIO DISCLOSURE

The ambition of this Article is to gauge how non-specialists in law and finance think about executive compensation. Other studies have shown that lay persons underestimate actual CEO pay and have a desire for a smaller gap between CEO and worker pay.⁵⁷ Yet, many finance economists and corporate lawyers regard agency costs as the exclusive normative framework for evaluating compensation packages. Does anyone else care about agency costs or aligning pay and performance? If non-specialists are attentive to absolute pay levels but not to performance, this can provide a straightforward explanation for the existence of section 953(b) and, also, indicate the potential for similar reforms in the future.

Our study reported here consists of two experiments. The first examines the degree to which laypeople consider a public company’s performance when they evaluate the compensation of the company’s chief executive. The second examines how section 953(b) affects laypeople’s ability to calibrate their attitude toward executive compensation in light of company performance.

A. Experiment 1: Pay & Performance

1. Methods and Rationale

The first experiment examines the degree to which laypeople’s evaluations of executive compensation are calibrated in light of the performance of the executive’s company. We recruited 204 American persons to participate in an online study through Amazon Mechanical Turk (“mTurk”). Research suggests mTurk is an inexpensive way to collect quality data from persons who are representative of the general internet-using population.⁵⁸ The participants in this convenience sample identified as 51.30% female, 76.60% Caucasian, and averaged 35.96 years of age (with a standard deviation of 10.34 years). Approximately 32.20% of participants in the sample had completed at least a college degree, and the median household income of the sample was between \$50,000 and

54. Gretchen Morgenson, *Portland Adopts Surcharge on CEO Pay in Move vs. Income Inequality*, N.Y. TIMES (Dec. 7, 2016), <https://www.nytimes.com/2016/12/07/business/economy/portland-oregon-tax-executive-pay.html>.

55. S 0257, Gen. Assemb., Jan. Sess. (R.I. 2015), <http://webserver.rilin.state.ri.us/BillText/BillText15/SenateText15/S0257.pdf>.

56. SB-1372, 2013-2014 Leg., Reg. Sess. (Ca. 2014), http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140SB1372.

57. Sorapop Kiatpongsan & Michael I. Norton, *How Much (More) Should CEOs Make? A Universal Desire for More Equal Pay*, 9 PERSP. ON PSYCHOL. SCI. 587, 587 (2014).

58. See generally, e.g., Joseph K. Goodman et al., *Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples*, 10 J. BEHAV. DECISION MAKING 1002, 1002 (2013).

\$59,999. A demographic breakdown of all 576 participants in this study—including participants in Experiment 1 and Experiment 2—is produced in Table 1 below. Participants were paid a nominal amount for their involvement in the experiment.

Experiment 1 had three aims: to determine whether laypeople (1) are sensitive to high and low executive salaries when evaluating a fictitious CEO; (2) are sensitive to exceptional or poor performance of the executive's company when evaluating the CEO; and (3) modify their reactions to the CEO's salary in light of the company's performance. This experiment consisted of a 2 (CEO salary: high vs. low) x 2 (company performance: good vs. poor) between-subjects factorial design, and participants were randomly assigned to one experimental condition.

Table 1: Pooled Participant Demographics (Experiments 1 and 2; $N = 576$)

	%	N
Age (Median: 34.00)		
20–29	32.2	185
30–39	39.2	226
40–49	16.6	96
50–59	07.6	44
60–70	04.4	25
Gender		
Male	51.6	298
Female	48.4	278
Race		
White	75.3	434
Non-White	24.7	142
Education		
High School	14.2	82
Some College	28.8	166
College	42.4	244
Master's	10.5	61
Ph.D. or Professional	04.1	23
Income		
Less than \$30,000	37.4	215
\$30,000–\$49,999	25.8	149
\$50,000–\$69,999	16.3	94
\$70,000 or greater	20.5	118
Political Orientation		
More Conservative	37.0	213
More Liberal	63.0	363
Stock Ownership		

Owner	35.5	204
Non-Owner	64.5	372

Note: Select demographic categories have been collapsed. Full sample information is on file with the authors.

This experiment required participants to read a fictitious newspaper article that reported on the chief executive of a fictitious company. All four articles followed the same pattern: the headline indicated the name of the chief executive and listed his salary, the article contained information placing his salary in the context of salaries at similar companies, and the article quoted industry analysts who commented on the company's performance.

We manipulated the executive's salary in accordance with current data on the salary of Fortune 500 CEOs. If participants were exposed to a highly-paid chief executive, the headline read that he was awarded \$27 million (in base salary and stock options), and the body of the article indicated his salary placed him in the 75th percentile of Fortune 500 CEOs. If participants were exposed to a lowly-paid chief executive, the article read that he was awarded \$8 million, placing him in the 25th percentile of Fortune 500 CEOs.⁵⁹ The newspaper article indicated how the CEO's compensation award compared to that of other CEOs, so participants would know whether a pay package was "high" or "low" in the universe of executive compensation.

We manipulated the company's performance through quotes from industry analysts and awards given to the chief executive. The article noted the exceptionally-performing company had financial and operating performances that were the highest in the industry, and that the CEO was recently named as one of the best CEOs in the country by a leading industry magazine. The poorly-performing company was noted to have the lowest financial and operating performance in the industry (lagging behind the growth of its competitors), and whose CEO was recently added to the list of worst CEOs compiled by an industry magazine.⁶⁰

After reading the fictitious newspaper article, participants answered several questions designed to gauge their perceptions of the chief executive, collect demographic information from them, and collect data with respect to several individual difference measures in the psychology literature that we hypothesized would bear on their impressions of the chief executive.

One subset of questions was designed to measure participants' self-reported moral outrage at the chief executive, on the theory that high levels of moral outrage engage laypeople to address the perceived moral transgression in an effort to eliminate it.⁶¹ The

59. See Claire Zillman, *CEOs Took a Massive Pay Cut Last Year*, FORTUNE (Apr. 8, 2016), <http://fortune.com/2016/04/08/ceo-pay-2015/> (explaining that CEO salaries have declined). Pretesting supports the proposition that laypeople perceive the 25th percentile as a low CEO salary ($M = 3.20$, $SD = 1.05$, based on a seven-point Likert scale ranging from "very low CEO salary" to "very high CEO salary") and the 75th percentile as a high CEO salary ($M = 5.02$, $SD = 1.14$), $F(1, 98) = 4.05$, $p < .05$.

60. Pretesting revealed that participants perceived these outcomes as reflecting differentially positive performance ($M\text{-good} = 5.38$, $SD\text{-good} = 1.08$; $M\text{-bad} = 3.20$, $SD\text{-bad} = 1.32$), $F(1, 98) = 3.89$, $p < .001$. Because we anticipate the effect of company performance will be weak in this study, we crafted the manipulation to be particularly salient to participants, such that the CEO's performance was particularly excellent or particularly poor. A sample newspaper story is on file with author.

61. See generally Robert J. MacCoun, *Moral Outrage and Opposition to Harm Reduction*, 7 CRIM. L. &

questions asked participants to agree or disagree—on a seven-point Likert scale—with several statements derived from MacCoun’s work on moral outrage.⁶² The six statements read: “The amount paid to the CEO made me angry,” “I was distressed by the amount paid to the CEO,” “I was unhappy with the amount paid to the CEO,” “The amount paid to the CEO frustrated me,” “The amount paid to the CEO disgusted me,” and “The payment made to the CEO was immoral.”⁶³

Another subset of questions was designed to collect demographic data from participants, in light of research that suggests demographic variables—as well as individual difference variables—can affect laypeople’s perceptions of wealthy individuals.⁶⁴ These questions collected basic demographic information, including the participant’s age, gender, race,⁶⁵ highest educational degree attained, current income (in increasing categories of \$10,000 up to \$100,000+), and political orientation (in which participants were presented with a forced choice of ‘more conservative’ or ‘more liberal’). Additionally, because of the subject matter of this experiment, participants were asked whether they have ever owned stock independent of 401k (or similar) plans offered through their employer.

The final subset of questions examined psychological individual-difference variables that may affect how participants evaluate wealthy individuals including chief executives. The first individual difference trait we measured was cynicism. Psychology research characterizes trait cynicism as a defensive mechanism whereby people attribute selfish motives to the actions of others and adopt a jaded attitude toward their behaviors.⁶⁶ In the context of wealthy individuals, the cynic may be less surprised or offended by high levels of executive compensation and may, therefore, be less morally outraged at (and opposed to) those levels. We asked participants several questions, based on the work of Kanter and Wortzel, to measure trait cynicism.⁶⁷

We also measured the degree to which participants subscribe to a social dominance view of social order. Individuals high in a social dominance orientation toward their environment manifest a strong preference for hierarchy, with those higher in the social hierarchy exercising dominion over lower-status individuals.⁶⁸ We would expect individuals high in a social dominance orientation to react strongly and positively to the chief executive in our experiment and to be relatively insensitive to the absolute salary or performance of the CEO. We asked participants several questions, derived from the work of Pratto et al., to measure participants’ social dominance orientation.⁶⁹

Similarly, we measured the degree to which participants subscribe to a system

PHIL. 83 (2013) (discussing moral outrage and its effect on peoples’ actions).

62. *Id.*

63. *Id.*

64. See, e.g., Suzanne Horwitz et al., *Social Class Differences Produce Social Group Preferences*, 17 DEVELOPMENTAL SCI. 991 (2014); see also Suzanne R. Horwitz & John F. Dovidio, *The Rich—Love Them or Hate Them? Discrepant Implicit and Explicit Attitudes Toward the Wealthy*, 20 GROUP PROCESSES & INTERGROUP REL. 3, 8 (2017).

65. For theoretical reasons to be addressed *infra*, we collapsed our data on participant race into two categories: white participants and non-white participants.

66. See Donald L. Kanter & Lawrence H. Wortzel, *Cynicism and Alienation as Marketing Considerations: Some New Ways to Approach the Female Consumer*, 2 J. CONSUMER MARKETING 5 (1985).

67. *Id.*

68. Felicia Pratto et al., *Social Dominance Orientation: A Personality Variable Predicting Social and Political Attitudes*, 67 J. PERSONALITY & SOC. PSYCHOL. 741 (1994).

69. *Id.*

justification theory of order in their social environment.⁷⁰ System-justifying individuals tend to believe that individuals in society receive their just deserts, both positively and negatively, and subscribe to the adage “all things happen for a reason.” System-justifiers often include individuals of lower social status who develop a bias favoring higher-status individuals. Thus, an individual high in the trait of system justification would likely hold favorable attitudes toward chief executives compared to those who are neutral or low in system justifying beliefs. We measured this trait using questions derived from the work of Jost et al.⁷¹

Finally, we measured the degree to which participants’ locus of control—the way in which they make causal attributions regarding the events in their lives—reflects a belief that their fortunes or misfortunes are the result of decisions made by powerful others.⁷² We included this individual difference variable to determine if people high in a locus of control that implicates powerful others would be less morally outraged at chief executives than would other participants (on the theory that they admire those who control them) or more so than other participants (on the theory that they resent those who control them). We measured this trait using questions from the work of Rotter.⁷³

a. Hypotheses

We developed several hypotheses for Experiment 1. The main hypotheses involve the effects, in isolation and interactively, of a chief executive’s salary and the performance of his company on laypeople’s impressions of the CEO. The experiment consisted of four conditions: (1) high pay/good performance; (2) high pay/poor performance; (3) low pay/good performance; and (4) low pay/poor performance. If laypeople attend to a CEO’s salary in light of the performance of her company—as do specialists—we would expect pay and performance to exert nearly equal effects on people’s mean levels of moral outrage at the CEO.

Specifically, if the pay-performance hypothesis is correct, we would expect extreme levels of outrage (in both directions) when a mismatch exists between chief executive pay and company performance: participants would be the most outraged at the highly-paid CEO who performs poorly, and would be the least outraged at the lowly-paid CEO who performs well. In between those polarized levels of outrage, we would expect to see the mean outrage levels from participants in the conditions where pay aligns with performance, both positively and negatively.⁷⁴

But if participants focus mostly on levels of compensation in isolation, with only mild attention to company performance, we would expect different results. We would see the highest levels of outrage in the high-pay conditions (which may or may not meaningfully differ from one another) followed by a significant drop in outrage in the two low-pay

70. John T. Jost et al., *A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo*, 25 POL. PSYCHOL. 881 (2004).

71. *Id.*

72. Julian B. Rotter, *Generalized Expectancies for Internal Versus External Control of Reinforcement*, 80 PSYCHOL. MONOGRAPHS: GEN. & APPLIED 1 (1966).

73. *Id.*

74. The pay-performance theory does not predict exactly where on the outrage scale these experimental conditions would fall—and their exact placement does not matter. The means in these two conditions should, however, be statistically similar to one another and statistically different from the means in which there is a mismatch between CEO pay and company performance.

conditions. This pattern of results would suggest laypeople are not particularly sensitive to information concerning a company's performance and, therefore, do not calibrate their attitudes toward executive compensation in light of that information.

Finally, we predict that each of our psychological measures will independently predict laypeople's attitudes toward corporate executives, and that these factors may explain most of the variance accounted for in our model. In other words, we expect that (1) our experimental manipulations testing the alleged pay-performance link; (2) demographic variables; and (3) psychological variables will meaningfully and significantly contribute to our understanding of laypeople's moral outrage toward corporate executives.

2. Results and Discussion

This subsection proceeds in several parts. First, we examine statistically several of our dependent measures to create indices for use in our main analysis. Second, we examine the effects of our experimental manipulations on participants' self-reported moral outrage, both in isolation and jointly. Third, we place our experimental results in the context of demographic and individual difference variables that research suggests affect lay outrage toward CEO compensation.

a. Preliminary Analyses

In addition to pretesting our experimental manipulations,⁷⁵ we developed several scales designed to measure participants' self-reported moral outrage, as well as the degree to which participants possessed the traits of cynicism, social dominance, system justification, and a power-focused locus of control.

We conducted a principal component analysis (with an oblique rotation) on all six items hypothesized to measure participants' levels of moral outrage to determine whether, altogether, they measure the same underlying psychological construct.⁷⁶ The analysis revealed a one-factor solution with an Eigenvalue greater than 1.0, which explained nearly 85% of the variance in participants' responses. This suggests all six items measure the same underlying construct.⁷⁷ We also conducted a reliability analysis that indicated the items constitute a highly reliable scale measuring that latent construct (6 items, Cronbach's alpha = .96).⁷⁸ We, therefore, averaged participants' responses to all six items into a moral outrage index measure. We performed similar analyses on each of the psychological individual difference items and created index measures for cynicism, social dominance, system justification, and power-focused locus of control.⁷⁹ Tables 2a and 2b below

75. See *supra* notes 59–60.

76. See I. T. JOLLIFFE, PRINCIPAL COMPONENT ANALYSIS 154 (2d ed. 2008) (describing the effects of using an oblique rotation method); see also Harold Hotelling, *Analysis of a Complex of Statistical Variables into Principal Components*, 24 J. EDUC. PSYCHOL. 417 (1933) (explaining the tenets of a principal component analysis and the meaning of an oblique factor rotation).

77. Factors in a principal component analysis are meaningful if their statistical "eigenvalues" are greater than 1.0. See JOLLIFFE, *supra* note 76.

78. The reliability of a psychometric scale is measured by a Cronbach's alpha statistic ranging from 0.00 (lowest reliability) to 1.0 (highest reliability). See Lee J. Cronbach, *Coefficient Alpha and the Internal Structure of Tests*, 16 PSYCHOMETRIKA 297, 299 (1951) (providing a generalized formula based on one provided by Kuder and Richardson).

79. Each principal component analysis yielded a one-factor solution that explained over 75% of the relevant variance. Each subsequent reliability analysis revealed a Cronbach's alpha score greater than .80.

illustrate the results of the principal component analysis with respect to our moral outrage index.

*b. Main Analysis I: Pay vs. Performance*⁸⁰

The belief that laypeople attend equally to absolute pay and company performance when evaluating CEO pay assumes CEO salary and company performance have equally strong and significant independent effects on laypeople's attitudes toward the CEO, such that good company performance mitigates laypeople's anger toward high absolute CEO pay levels. In contrast, our hypothesis predicts a strong main effect of absolute salary levels, but a weak effect (if any) of company performance.

80. We report the results of an analysis of variance. An analysis of variance ("ANOVA") provides a statistical test of whether the means of several groups are equal. ANOVA results are represented by an F-statistic, and the sizes of the effects are represented by η^2_p . Means are denoted by the letter "M" and standard deviations are denoted by the letters "SD." See ROBERT M. LAWLESS ET AL., EMPIRICAL METHODS IN LAW 277–85 (1st ed. 2010) (explaining empirical research methodologies and statistical techniques). Differences are denoted as "statistically significant" in this Article if the statistical tests indicate the likelihood that the difference observed would occur by chance is 5% or less (as indicated by the p-value as $p < 0.05$). A difference is "marginally significant" if the likelihood of seeing such a difference by chance is greater than 5% but less than 10%. Jennifer K. Robbennolt, *Apologies and Legal Settlement: An Empirical Examination*, 102 MICH. L. REV. 460, 485 n.117 (2003) (citing BARBARA G. TABACHNICK & LINDA S. FIDELL, USING MULTIVARIATE STATISTICS (2d ed. 1989)). Statistically significant differences are denoted by asterisks of increasing number in our graphs. "N.S." stands for "non-significant."

Table 2a: Principal Component Analysis of Moral Outrage Index

Total Variance Explained						
Initial Eigenvalues				Extraction Loadings		
Component	Total	% Var.	Cum. %	Total	% Var.	Cum. %
1	5.07	84.46	84.46	5.07	84.46	84.46
2	0.36	5.95	90.41			
3	0.21	3.42	93.83			
4	0.17	2.77	96.60			
5	0.12	2.03	98.63			
6	0.08	1.37	100.00			

Table 2b: Factor Loadings for Individual Moral Outrage Items

Individual Items	Loading
Amount paid to CEO frustrated me	0.96
Amount paid to CEO made me angry	0.95
Unhappy with the amount paid to the CEO	0.93
Disgusted by the salary paid to the CEO	0.93
Distressed by the amount paid to the CEO	0.90
Payment to the CEO was immoral	0.85

To test these competing hypotheses—and to test for the possibility of a joint, interactive effect of pay and performance not currently hypothesized—we performed a 2 (CEO pay: high vs. low) x 2 (company performance: good vs. poor) factorial analysis of variance (ANOVA) on the index measure of participants' moral outrage toward the CEO.⁸¹ The analysis revealed a strong and statistically significant independent effect of the CEO's absolute level of pay, such that high levels of pay were associated with greater moral

81. We chose to evaluate the experimental results through an analysis of variance instead of a regression analysis because our question of interest was whether mean outrage levels meaningfully differed across experimental groups, not the exact change in outrage levels associated with the different experimental conditions. The Likert scale is a well-established and useful tool in empirical research, but the points along the scale are arbitrary, and so the more meaningful finding is whether the group averages differ statistically. When we later situate these experimental results in the context of a predictive model that includes demographic and psychological variables, we switch to a linear regression model to (1) compare the size of the effects of our predictors by examining standardized beta weights; and (2) accommodate continuous predictor variables. For a general discussion of these points, see Geoff Norman, *Likert Scales, Levels of Measurement, and the "Laws" of Statistics*, 15 ADVANCES HEALTH SCI. EDUC. 625 (2010).

outrage.⁸² As predicted, the analysis revealed a much weaker (and less reliable) statistically-significant main effect of company performance, such that higher performing CEOs were associated with less moral outrage.⁸³ Also as expected, the analysis revealed no statistically significant interaction between absolute levels of CEO pay and company performance, which—along with the weak effect found for company performance—suggests laypeople in our sample did not substantially modify their attitudes toward executive compensation in light of the firm's performance.⁸⁴ Illustrations of the significant main effects and the means for each experimental condition appear in Figure 2 below. The presence of two asterisks indicates a statistically significant difference at the $p < .01$ level, and the presence of three asterisks indicates a statistically significant difference at the $p < .001$ level.⁸⁵

82. M-high = 5.19, SD = 1.57; M-low = 3.59, SD = 1.66; $F(1, 200) = 52.04$, $p < .001$, $n^2_p = .21$.

83. M-poor = 4.68, SD = 1.68; M-good = 4.13, SD = 1.88; $F(1, 200) = 6.92$, $p = .009$, $n^2_p = .03$. We then formally tested whether the effect sizes that resulted (.21 for CEO salary and .03 for performance) were significantly different from each other. Using Cumming's bootstrapping technique to compare the confidence intervals surrounding the effect sizes, we conclude that the effect of CEO salary on moral outrage is substantially (and significantly) larger than the effect of company performance. See Geoff Cumming, *Inference by Eye: Reading the Overlap of Independent Confidence Intervals*, 28 STAT. MED. 205 (2009).

84. $F(1, 200) = 0.18$, $p > .05$.

85. The dashed line in Figure 2b indicates the midpoint of the Moral Outrage scale.

Figure 2a. Main Effects of CEO Salary and Company Performance on Moral Outrage

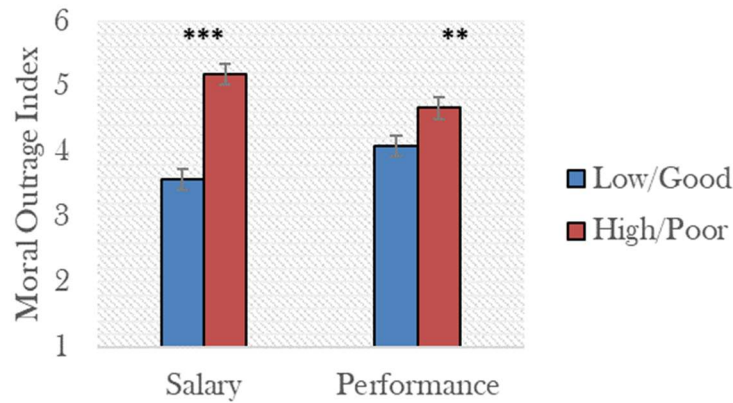
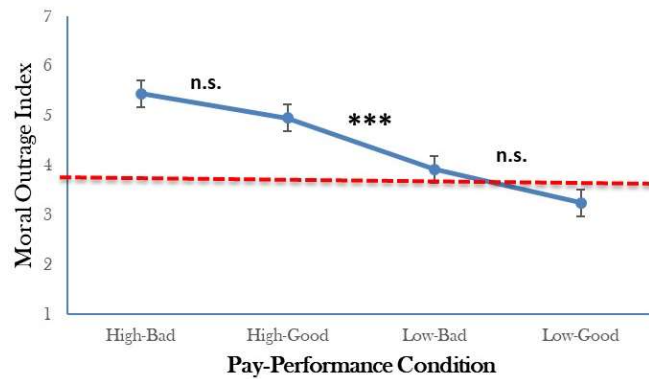


Figure 2b: Graph of All Pay-Performance Conditions (Moral Outrage)



Additionally, we conducted three post-hoc comparisons of the moral outrage means in our experimental conditions using the conservative Bonferroni procedure (to control for Type I error).⁸⁶ We compared the means for the following conditions to determine if they differed significantly: (1) “high pay/good performance” and “high pay/bad performance”; (2) “low pay/good performance” and “low pay/bad performance”; and (3) “high pay/good performance” and “low pay/bad performance.” As illustrated in Figure 2b, the tests revealed just one significant mean difference: the difference between the “high pay/good performance condition” and the “low pay/bad performance condition”.⁸⁷ The other two comparisons, which examined the effect of performance within the “high pay” and the “low

86. See generally Juliet P. Shaffer, *Multiple Hypothesis Testing*, 46 ANN. REV. PSYCHOL. 561 (1995) (discussing various post-hoc techniques, including the Bonferroni procedure).

87. Under the Bonferroni method, $M_{\text{high/good}} = 4.94$, $SD = 1.71$; $M_{\text{low/bad}} = 3.92$, $SD = 1.63$; $p < .05$.

pay” conditions, revealed no statistically significant effects of performance.⁸⁸

*c. Main Analysis II: Robustness Tests*⁸⁹

We next evaluated the effects of our experimental manipulations, first in isolation then in the context of demographic and psychological variables that previous research suggests affect attitudes toward CEOs. In doing so, we test the explanatory power of our models as a whole and, also, the relative strength of each set of variables on participants’ levels of moral outrage. Because we did not predict any interactive effects of pay and performance on participants’ moral outrage scores—and indeed, we found no effects—the regression analyses reported below are main effects models.

Table 3 below reveals the results of three regression analyses. The first examines the main effect of CEO salary and the main effect of company performance on laypeople’s self-reported moral outrage. The second analysis includes the predictor variables from Model 1, but also includes demographic variables. The full model is revealed in the third analysis, which includes psychological individual difference measures. We analyze the models serially below.

The results from the experimental main effects model (Model 1) complement the results reported in the analysis of variance above. The standardized beta weights and p-values indicate that, in isolation, participants’ self-reported moral outrage was significantly affected by the absolute level of the CEO’s salary. Participants were not insensitive to company performance—which was also a statistically significant predictor of moral outrage—but participants’ feelings of moral outrage were substantially less affected by company performance. Together, these variables explain roughly 25% of the variance in participants’ moral outrage, which differs significantly from zero.⁹⁰

The second model includes several demographic variables—including our participants’ age, race, gender, education, income, political orientation, and stock ownership—in addition to the experimentally manipulated predictor variables reported in the previous model. As Model 2 illustrates above, when these variables were regressed on the moral outrage index, several findings emerged. The experimental predictor variables remained statistically significant with roughly the same effect sizes. As in Model 1, the effect of absolute CEO salary levels was larger and more reliable than the statistically significant effect of company performance.⁹¹

Table 3: Regression Models: Moral Outrage (Experiment 1)

88. Under the Bonferroni method, for the high salary conditions: M-high/bad = 5.44, SD = 1.38, M-high/good = 4.94, SD = 1.71; $p > .05$ (Bonferroni method). For the low salary conditions: M-low/bad = 3.92, SD = 1.63, M-low/good = 3.24, SD = 1.64; $p > .05$.

89. As we stated in our discussion, *supra* Part III.A.2.b, regarding our choice to use the analysis of variance technique with respect to the experimental results, we now move to a linear regression technique to create a predictive model in order to, among other reasons, accommodate continuous predictor variables. A linear regression is a statistical test that estimates the independent effects of several predictor variables on a continuous dependent variable. See LAWLESS ET AL., *supra* note 80, at 29, 300–31 (discussing various methods of empirical testing).

90. $F(2, 199) = 31.15$, $p < .001$ (raw r^2 difference = .238).

91. We again used Cumming’s bootstrapping technique to compare the confidence intervals surrounding the standardized beta weights, and we conclude that the effect of CEO salary on moral outrage is substantially (and significantly) larger than the effect of company performance. See *generally* Cumming, *supra* note 83.

	Model 1	Model 2	Model 3
CEO Salary	0.46***	0.48***	0.48***
Performance	-0.18**	-0.17**	-0.15*
Demographics			
Age		-0.02	0.00
Race		0.16**	0.16**
Gender		0.07	0.02
Income		0.10	0.06
Education		-0.09	-0.09
Politics		0.17**	0.11*
Stockowner		-0.10*	-0.12*
Personality			
Cynicism			-0.19**
Dominance			-0.20**
System			-0.18**
Power Locus			-0.19**
Adjusted R ²	.23	.28	.39
N	201	201	201

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; "Dominance" = social dominance orientation;
 "System" = system justification.

In addition, Model 2 revealed a statistically significant effect of race, such that white participants reported higher levels of moral outrage at executive compensation than did non-white participants. It also revealed a statistically significant effect of political orientation, such that individuals who self-reported as “more liberal” experienced greater moral outrage at the CEO than did those who self-reported as “more conservative” (regardless of the CEO’s salary or performance). Finally, the model reveals a significant effect of stock ownership, such that non-owners were, on average, more outraged at the CEO than were stock owners. Model 2 explained nearly 30% of the variance, which was a statistically significant increase over the variance explained in Model 1.⁹²

The third model incorporates several psychological individual difference variables into the regression equation in addition to (a) the demographic variables included in Model 2 and (b) the experimental variables included in Model 1. This regression analysis largely replicated the results from Model 2, insofar as both experimental variables remained statistically significant predictors of participants’ moral outrage. Importantly, absolute CEO salary again more strongly predicted lay outrage than did company performance. Additionally, Model 3 revealed statistically significant effects of race, political orientation, and stock ownership on laypeople’s moral outrage, consistent with the prior model. The model also revealed statistically significant main effects of each of the psychological individual difference variables, such that cynical participants expressed less moral outrage at CEO compensation compared to non-cynics, as did participants who subscribed to a social dominance, system justification, or power-focused worldview of their social environment. Altogether, Model 3, which included experimental predictors, demographic predictors, and psychological predictors, explained nearly 40% of the variance in participants’ outrage at executive compensation. This was a substantial, and statistically significant, improvement in explanatory power over Model 1 and Model 2.⁹³

3. Summation and Follow-Up Experiment: Public v. Private

Several important implications follow from the results reported in Experiment 1. Most importantly, the data do not support the theory that laypeople carefully calibrate their judgments about executive compensation in light of company performance. Instead, we found that although participants are not blind to company performance in evaluating corporate executives, performance affects their judgments substantially less than does the absolute salary paid to the CEO. And perhaps most significantly, post-hoc tests confirmed that, within different levels of CEO pay, performance had no effect on our participants’ levels of moral outrage.

Additionally, we found that pay and performance explain roughly 25% of the variance in the moral outrage laypeople feel toward executive compensation. In situating these variables in their demographic and psychological context, we were able to increase the explanatory power of the model to nearly 40% of the variance, with participant race, political orientation, stock ownership, cynicism, social dominance orientation, system justification tendencies, and locus of control, each independently affecting how participants view corporate executives. Specifically, and as predicted, we found intriguing demographic effects of race, political orientation, and stock ownership, such that white

92. $F(7, 192) = 3.03$, $p = .005$ (raw r^2 difference = .076).

93. $F(4, 188) = 9.25$, $p < .001$ (raw r^2 difference = .113).

participants, liberals, and non-stockowners expressed greater moral outrage at corporate executives than did non-white participants, conservatives, and stockowners. Each of these findings contributes to our understanding of the circumstances under which the public will legitimize—or fail to legitimize—the current corporate compensation structure.

The most important result from Experiment 1—that moral outrage over absolute levels of executive compensation does not appear to be affected substantially by company performance—suggests laypeople do not conceive of high levels of executive compensation as an agency problem. We decided to test this proposition in a brief follow-up pilot experiment. This follow-up experiment tracked the methodology of Experiment 1 with minor deviations. We fixed the CEO's compensation at the 75th percentile and fixed the company's performance as poor for all participants. We then manipulated solely whether the company was described as (1) a *public* company with a board of directors and a separate CEO or (2) a wholly-owned *private* company with one sole (CEO) employee.

If participants think of executive compensation in terms of agency costs, they should experience high levels of moral outrage in the public condition, because there is a substantial likelihood of an agency problem when the CEO of a public company commands a high salary while bringing in substandard returns. In contrast, participants' levels of moral outrage should be significantly lower when the company is privately owned, because the agency problem that may exist in the public company setting is no longer present.⁹⁴ If, however, participants do not conceive of inappropriate levels of executive compensation as an issue of agency costs, we would expect to see no meaningful difference between their levels of moral outrage with respect to the salary of the public and private corporate executive.

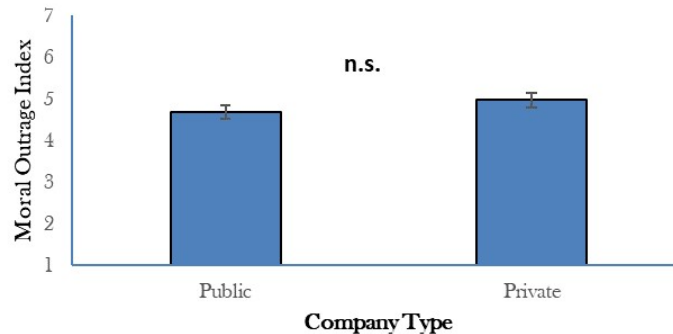
Using the same methods as Experiment 1, we recruited 117 new participants for this follow-up experiment. Participants again read a fictitious newspaper account of a fictitious company and answered several questions. As in Experiment 1, each participant was exposed to only one experimental condition. We engaged in pretesting that confirmed the validity of our moral outrage index and our experimental manipulation. We also performed a power analysis to determine the number of participants that we would need to ensure that we would be able to detect a statistically significant difference between our experimental groups.

To evaluate whether participants were equally outraged at the compensation earned by public and private CEOs, we conducted a one-way ANOVA of participants' moral outrage scores. The analysis revealed no meaningful difference between participants' outrage with respect to the public CEO's compensation and their outrage aimed at the private CEO's compensation.⁹⁵ This follow-up experiment thus confirms what the results from Experiment 1 strongly suggest: laypeople (in our samples) do not conceive of executive compensation in terms of agency costs. Figure 3, which illustrates the results of this follow-up experiment, appears below.

94. See, e.g., Ronald J. Gilson & Charles K. Whitehead, *Deconstructing Equity: Public Ownership, Agency Costs, and Complete Capital Markets*, 108 COLUM. L. REV. 231 (2008) (discussing the relationship between agency costs in public and private companies).

95. M-public = 4.68, SD = 1.38; M-private = 4.97, SD = 1.23; $F(1, 115) = 1.42$, $p > .05$.

Figure 3: Effects of Company Type on Reported Moral Outrage



B. Experiment 2: The Median Pay Ratio

The results from Experiment 1 strongly dispute the notion that laypeople evaluate executive compensation through a pay-performance link that implicates agency costs. The results also suggest, however, that company performance is not irrelevant. Rather, although it is a statistically significant predictor of lay outrage with respect to levels of executive compensation, it is a weaker and less reliable predictor than the absolute level of pay.

The median pay ratio disclosure requirement in section 953(b) may hinder laypeople's ability or desire to evaluate executive compensation in terms of agency costs. If the absolute amount of a CEO's salary is a strong and significant predictor of lay outrage at executive compensation levels, and the company's performance is already a weaker and less stable predictor of outrage levels, several predictions can be made with respect to the effect of requiring public companies to disclose their median worker salaries to the public. Because of the heightened salience that absolute levels of salary receive in the public media, we hypothesize that exposing laypeople to the (often times) significant contrast between high CEO salaries and the comparatively modest salary levels of other company employees will amplify the already strong effect of absolute salary levels on lay outrage toward CEOs.⁹⁶

Concurrently, we predict the contrast between the median worker's salary and the CEO's salary will be so salient to laypeople that their attention may focus solely on these data. Consequently, median salary information may crowd out—that is, eliminate altogether—the already tenuous effect of company performance on lay outrage toward executive compensation levels.⁹⁷ Finally, we explicitly predict no interactive effect, in which median worker information raises levels of outrage only, for example, where an agency problem exists (i.e., the situation in which a highly-paid CEO's company performs poorly). Instead, and in light of our previous predictions, we hypothesize the effect of

96. See Ap Dijksterhuis et al., *Seeing One Thing and Doing Another: Contrast Effects in Automatic Behavior*, 75 J. PERSONALITY & SOC. PSYCHOL. 862, 865–69 (1998) (discussing salience and contrast effects in social judgment).

97. See generally Bruno Frey, *Crowding Out and Crowding In of Intrinsic Preferences*, in REFLEXIVE GOVERNANCE FOR GLOBAL PUBLIC GOODS (Eric Brousseau et al. eds., 2012) (discussing the “crowding out” phenomenon).

median employee salary information will be additive, and will serve only to raise levels of moral outrage regardless of the CEO's salary or the company's performance. This, of course, may be the intended result for proponents of section 953(b).

Finally, in light of the demographic effects we found in our regression models in Experiment 1, and the strength of the effect of absolute CEO salary levels, we generated secondary hypotheses regarding the ways in which absolute CEO salary levels may interact with these demographic variables. Based on prior research and theory,⁹⁸ we expect our model may reveal three interactive effects of demographic variables and CEO salary: (1) an interactive effect of race, such that white participants are angrier at higher levels of CEO pay than are non-whites; (2) an interactive effect of political orientation, such that liberals are angrier at CEO pay than are conservatives; and (3) an interactive effect of stock ownership, such that stock owners are less angry at lower CEO salaries than are non-owners. We test these secondary hypotheses at the conclusion of Experiment 2.

1. Methods

The methodology employed in Experiment 2 closely tracked the methods of Experiment 1. We recruited 255 participants through mTurk to participate in an online experiment. The convenience sample was 52.00% female, 76.10% Caucasian, and averaged 34.27 years of age (with a standard deviation of 9.57 years). Approximately 55.90% of participants had completed at least a college degree, and the median household income of the sample was between \$40,000 and \$49,999.

Experiment 2 had two aims: (1) as in Experiment 1, to determine whether laypeople evaluate executive compensation in light of company performance; and (2) to examine the effect of median employee salary information on laypeople's evaluations of executive compensation. The experiment consisted of a 2 (CEO salary: high vs. low) x 2 (company performance: good vs. poor) x 2 (median information: present vs. absent) between-subjects factorial design. Participants were randomly assigned to one of the eight experimental conditions.

Participants read a fictitious newspaper article describing the compensation of a corporate executive at a fictitious public company. The manipulations for CEO salary and company performance were the same as they were in Experiment 1. CEO salary was set at either \$27 million or \$8 million, and company performance was communicated to participants in terms of awards earned by the CEO and analyst commentary. Experiment 2 contained an additional manipulation. In each of the salary-performance conditions, half of participants were exposed to information regarding the median employee's salary (which was always \$24,000) and the ratio between the employee's salary and the salary of the CEO. For example, in the high CEO salary condition, half of our participants learned the median worker earned approximately 1000 times less than the CEO. In the low CEO salary condition, half of our participants learned the CEO earned roughly 333 times more than the median company employee.

After reading the newspaper article, participants answered six items designed to measure their levels of moral outrage, several demographic items, and several items designed to measure their trait cynicism, social dominance orientation, system justification tendencies, and the degree to which their locus of control centers on the role of powerful

98. See, e.g., Horwitz et al., *supra* note 64; Horwitz & Dovidio, *supra* note 64.

others in their environment. After completing these measures, participants were debriefed, and the experiment was concluded.

2. Results & Summation

This subsection proceeds in three parts. We first examine the effects—in isolation and jointly—of CEO salary, company performance, and median employee salary information on laypeople's self-reported outrage at levels of executive compensation. As we did in Experiment 1, we then situate these results within a main-effects regression model that accounts for our experimental manipulations, demographics information, and relevant psychological individual difference variables. Finally, we examine the potential interactive effects—predicted by prior research and theory—of (1) CEO salary information and race, (2) salary information and political orientation, and (3) salary information and stock ownership.

a. Preliminary Analyses

We attempted to replicate the indices we created in Experiment 1 regarding participants' self-reported moral outrage, trait cynicism, social dominance orientation, system justification tendencies, and locus of control. For each potential index, we conducted a principal component analysis (with an oblique rotation) on the relevant items and, if appropriate, then conducted a reliability analysis. The principal component analysis revealed that, for each potential index, the relevant items measured the same underlying construct, explained the vast majority of the variance in participants' responses, and together composed a highly reliable scale.⁹⁹ The items for each construct were then averaged to form an omnibus index variable.

b. Main Analysis I: Pay, Performance, & the Median Ratio

To determine whether CEO salary, company performance, and median employee salary information affect participants' outrage at executive compensation levels (independently or jointly), we conducted a 2 (CEO salary: high vs. low) x 2 (company performance: good vs. poor) x 2 (median salary information: present vs. absent) factorial ANOVA on participants' outrage levels. The analysis revealed a strong and significant effect of CEO salary, such that higher salaries were associated with heightened lay outrage.¹⁰⁰ The analysis also revealed a strong and significant effect of median employee salary information as well, such that the presence of this information raised moral outrage at all levels of CEO pay and company performance.¹⁰¹

Interestingly, the analysis revealed no statistically-significant main effect of company performance on outrage levels¹⁰² and no two-way interactive effect of CEO salary and company performance.¹⁰³ The absence of an interactive effect of pay and performance on outrage levels replicates the results reported in Experiment 1. Moreover, the absence of a

99. All items explained over 75% of the relevant variance (with each item loading on its respective scale above .80), and the Cronbach's alpha value for each scale was above .80 as well.

100. M-high = 4.78, SD = 1.72; M-low = 3.87, SD = 2.06; $F(1, 247) = 15.36$, $p < .001$.

101. M-present = 4.67, SD = 1.95; M-absent = 3.99, SD = 1.89; $F(1, 247) = 8.14$, $p = .005$.

102. M-good = 4.28, SD = 2.04; M-bad = 4.59, SD = 1.83; $F(1, 247) = 1.57$, $p > .05$.

103. $F(1, 247) = 0.59$, $p > .05$.

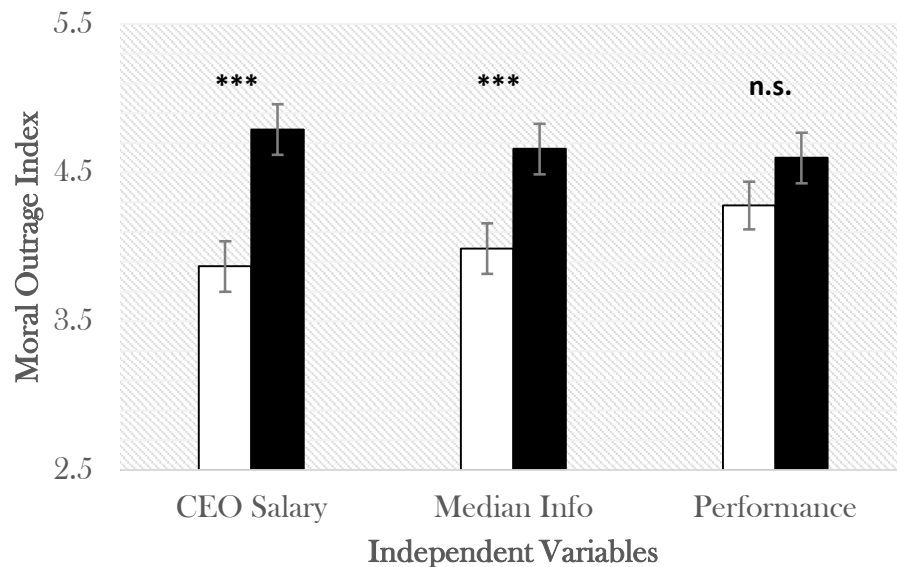
main effect of performance here suggests median employee salary information crowded out the (already weak) effect of company performance found in Experiment 1. Perhaps most importantly, the analysis also revealed no significant two-way or three-way interactive effects involving median employee salary information, which suggests the presence of median employee salary information was additive only.¹⁰⁴ An illustration of these results appears in Figure 4 below.

c. Main Analysis II: Robustness Tests

As in Experiment 1, because the analysis of variance revealed significant main effects and no interactive effects, we next situated our experimental results in a series of main-effects regression models that include both demographic and psychological predictors of lay outrage at executive compensation. The three models were constructed in the same manner as in Experiment 1: experimentally manipulated variables first, then demographic variables, and then psychological variables. The regression models—which confirm several findings from the models reported in Experiment 1—appear in Table 4 below.

104. Median-Performance: $F(1, 247) = 0.35$, $p > .05$; Median-Salary: $F(1, 247) = 0.45$, $p > .05$; Median-Performance-Salary: $F(1, 247) = 0.02$, $p > .05$.

Figure 4: Graph of Main Effects of Salary, Median, and Performance on Moral Outrage



Note 1: for 'CEO salary,' white represents low salary and black represents high salary.

Note 2: for 'median info,' white represents absence and black represents presence.

Note 3: for 'performance,' white represents good and black represents poor.

Note 4: X-axis begins at 2.5 to highlight the significant differences more clearly.

Model 1 confirms the results obtained in the three-way ANOVA and confirms our experimental hypotheses. It reveals the strongest predictor of moral outrage was the absolute amount of the CEO's compensation. The model also reveals a nearly equally large, additive effect of median employee salary information on levels of lay outrage. And most importantly, the model reveals a weak and statistically non-reliable effect of company performance. These variables explain roughly 10% of the variance in participants' self-reported moral outrage toward executive compensation.¹⁰⁵

105. The variance explained in Model 1 was statistically different from zero. $F(3, 244) = 8.87, p < .001$ (raw r^2 change = .098).

Table 4: Regression Models: Moral Outrage (Experiment 2)

	Model 1	Model 2	Model 3
CEO Salary	0.23***	0.25***	0.27***
Median Info	0.16***	0.17**	0.17**
Performance	-0.07	-0.08	-0.08
Demographics			
Age		-0.04	0.00
Race		0.01	0.01
Gender		0.13*	0.10
Income		-0.05	0.00
Education		0.04	0.01
Politics		0.21***	0.14**
Stockowner		-0.03	0.00
Personality			
Cynicism			-0.11*
Dominance			-0.11*
System			-0.16**
Power Locus			-0.11*
Adjusted R ²	.09	.14	.31
N	247	247	247

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; “Dominance” = social dominance orientation; “System” = system justification.

The second model includes demographic variables as independent predictors of lay outrage. Notably, the effect sizes of the experimental variables in this model remain consistent with those reported in Model 1. CEO compensation and employee median salary information remain statistically significant predictors of moral outrage, whereas company performance remains non-significant. Model 2 explains roughly 15% of the overall variance in lay outrage, which is a statistically significant increase over the variance explained in Model 1.¹⁰⁶

106. $F(7, 237) = 3.00$, $p = .005$ (raw r^2 change = .073).

Finally, the third model includes the effects of psychological individual difference traits on participants' self-reported outrage at levels of executive compensation. Again, as with Model 2, the effects (and non-effects) of the experimental variables remain constant in this model: absolute levels of pay strongly predict lay outrage at chief executives, median employee salary information increases that level of anger at all levels of CEO pay, and median information crowds out any effect of company performance on lay outrage levels. Moreover, each of the psychological individual difference variables affected lay outrage in the predicted direction: cynics, social dominance believers, system justifiers, and those with a power-focused locus of control were all much less outraged at executive compensation than were other participants, and many of these effects were as strong or stronger than the effect of absolute CEO salary levels. Finally, the full model had substantial explanatory power: Model 3 explained over 30% of the variance in participants expressed moral outrage at corporate executive salary levels, and the model explained significantly more of the variance than did Model 2.¹⁰⁷

d. Secondary Analysis: Demographic Interaction Models

Our last set of analyses examined several predicted interactive effects associated with absolute CEO salary levels: its interaction with participant race, political orientation, and stock ownership. The analysis revealed interactive effects of (1) race and absolute salary levels; and (2) political orientation and absolute salary levels. However, we surprisingly found no interactive effect of stock ownership.¹⁰⁸ The subsequent analysis, therefore, focuses on the significant interactions.

First, a two-way ANOVA that included CEO salary (high vs. low) and participant race as the independent variables, and included outrage index score as the dependent variable, revealed a statistically significant interactive effect.¹⁰⁹ We examined this interaction for white participants and non-white participants separately. Non-white participants exhibited no sensitivity to absolute levels of CEO pay in terms of their moral outrage,¹¹⁰ whereas CEO salary had a substantial and reliable effect on white participants' moral outrage scores.¹¹¹ Specifically, differences in absolute levels of CEO pay created over a one-point difference between outrage scores on the seven-point Likert scale for white participants (averaging a 4.90 in the high pay condition), whereas absolute levels exhibited just a 0.20 difference in outrage scores for non-white participants (averaging a 4.36 on the scale in the high pay condition).

Finally, we examined the relationship between absolute levels of CEO pay and participants' political orientation. A two-way ANOVA revealed a statistically significant interactive effect of these independent variables on participants' moral outrage scores.¹¹² This time, we examined the interaction at low and high levels of CEO pay to examine whether the same level of CEO pay affects conservatives and liberals differently. We found equal levels of outrage between conservatives and liberals—and therefore no effect of

107. $F(4, 233) = 15.95, p < .001$ (raw r^2 change = .178).

108. $F(1, 251) = 1.02, p > .05$.

109. $F(1, 251) = 3.70, p = .05$.

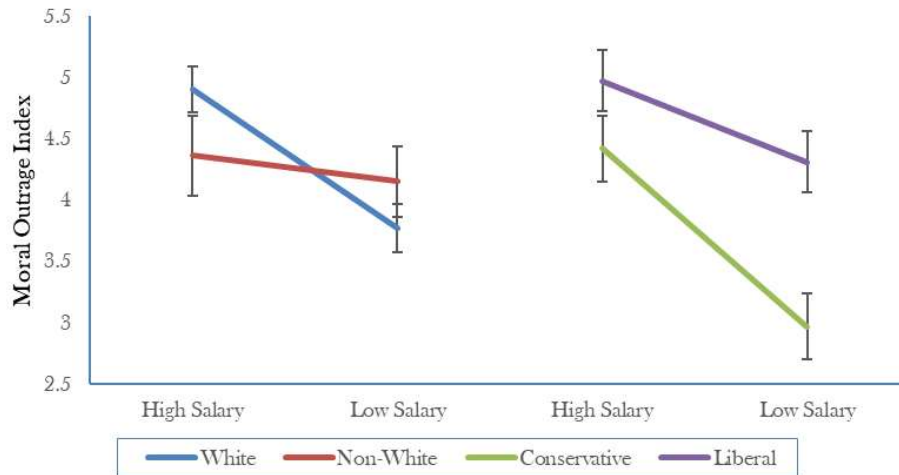
110. M-high = 4.36, SD = 1.72; M-low = 4.15, SD = 1.69; $F(1, 59) = 0.22, p > .05$.

111. M-high = 4.90, SD = 1.71; M-low = 3.77, SD = 2.18; $F(1, 192) = 16.08, p < .001$.

112. $F(1, 249) = 3.65, p < .05$.

political orientation—at high levels of executive compensation.¹¹³ But we found a strong and significant effect of political orientation on outrage levels when CEO compensation was relatively low.¹¹⁴ Specifically, we found roughly a 1.30-point difference in outrage scores, on average, whereby liberal participants were significantly angrier at a lowly-paid CEO than conservatives were. Figure 5, below, graphs the interactive effects with respect to participants' political orientation and race.

Figure 5: Interactive Effects of Race/Politics and CEO Salary Levels on Moral Outrage



IV. IMPLICATIONS OF THE RESULTS

Our findings on lay attitudes toward executive compensation have interesting implications for corporate governance and regulation, and we explore a number of them here. The first involves the particular provisions of Dodd-Frank, but the others sound more broadly on the dynamics behind the regulation of executive compensation.

A. The Mixed Effect of Dodd-Frank

As we show above, section 953(b) works at cross purposes with the policies behind other compensation-related regulation. There is no easy solution, at least not one that preserves the various impulses behind all of the provisions of Dodd-Frank.

Of course, one option for resolving that tension is to repeal section 953(b), a result that should be appealing, at least, to specialists whose normative commitments run solely to minimizing agency costs. In public debate, the case for repealing section 953(b) has been thus far grounded in cost-benefit analysis where the costs are the out-of-pocket expenses associated with compliance and the benefits new information for investors. The House Report on the repeal bill, for example, noted “the costs of complying with section 953(b)

113. $F(1, 125) = 2.94, p > .05$.

114. $M\text{-liberal} = 4.31, SD = 2.02; M\text{-conservative} = 2.97, SD = 1.90; F(1, 124) = 12.69, p = .001$.

are high relative to the minimal, if any, benefits that investors receive from the disclosures.”¹¹⁵ Our findings indicate a different kind of potential cost associated with section 953(b), and one that poses a more fundamental risk to basic corporate governance policy objectives. As we show above, lay persons are indifferent to firm performance when presented with the median pay ratio. The most harmful consequence of section 953(b) might not be the out-of-pocket compliance costs, but the effect it has on future policy. As our results show, section 953(b) undermines the salience of performance for lay persons.

Resolving the tension by repealing section 953(b), however, is likely too simple a solution. Dodd-Frank reflects a political compromise between two camps that wished to reform existing executive compensation practices, albeit in different ways. That those reforms undermine each other should not necessarily be surprising.

Another superficially promising approach might be for progressive reformers to avoid using corporate governance as a way to address income inequality. At best, corporate governance only indirectly affects inequality. Instead, perhaps progressives might attempt to regulate income directly by specifying more broadly a set of applicable strictures for compensation. Another possibility is to use various levers of tax policy to confront income inequality. As our own results demonstrate, however, this approach ignores the way lay persons comprehend CEO pay. The magnitude of the compensation matters, and so it will continue to be a focus of progressive reform efforts. The incompatibility lurking among the provisions of Dodd-Frank, in other words, may be inescapable.

B. The Paradox of Executive Compensation Regulation

Our findings suggest a paradox arises with the public regulation of executive compensation and, also, perhaps, a limit on the effectiveness of any regulatory campaign to push executive pay into greater alignment with performance.

The paradox arises because the two reform programs very likely need each other to succeed legislatively, yet each may limit the effectiveness of the other’s policy. The specialist approach treats compensation simply as a mechanism of corporate governance and focuses exclusively on agency costs and incentives. As our findings show, this approach has very little support among the lay public. Yet it can offer a trenchant critique of existing pay packages, together with a highly credentialed set of proponents. Likewise, the progressive critique of absolute levels of pay, despite its broad appeal as demonstrated in our findings, may have trouble gaining legislative traction because it can be easily characterized as based on nothing more than envy.¹¹⁶ When their forces are joined, however, they may have sufficient force to achieve legislative victory, as with Dodd-Frank.

At the same time, the very presence of one type of policy may limit the effectiveness of the other. Section 953(b) requires disclosures that, as we show, have a distinct and perhaps deliberate effect on recipients: they are angry over the absolute amount of compensation and do not care about the relationship of pay to performance. If retail stockholders behave as our respondents do, they may plausibly vote in ways that undermine the corporate governance role of executive compensation. Likewise, even sophisticated investors might vote that way if subjected to enough political pressure, as some public

115. H.R. REP. NO. 114–504, at 3 (2016).

116. The financial economist Kevin Murphy described the proponents of section 953(b) as “uninvited critics” and noted that they were motivated by “one of the least attractive aspects of human beings: jealousy and envy.” Murphy, *supra* note 38, at 12.

pension funds might conceivably be. Perhaps more significantly, this can have an effect not just on short-term corporate governance arrangements but also on future policy. Section 953(b) could plausibly limit or eliminate entirely political support for federal reforms that attempt to push pay and performance into greater alignment.

This also suggests a limit to the ways in which the agency costs regulatory program may ever arise in federal regulation. Agency cost-type regulatory interventions may be only politically feasible when they will plausibly drive down executive compensation, or at least not increase it. Those whose principal ambition is to limit or decrease CEO pay should be unlikely to join forces with regulations that will undermine their own goals. This legislative coalition, in other words, may be a one-way ratchet, at least in terms of the ways that legislation will promote the goal of using compensation to align incentives. The academic specialist approach largely views executive compensation as a mechanism of corporate governance, and the terms of debate are whether that mechanism requires some regulatory intervention to make it as effective as possible. Even if academic commentators were to unanimously endorse some proposal that might generate enormous payoffs for executives in the case of high performance, it would be unlikely to become policy, given the realities of lay opinion as we uncover here.

C. Debating the Normative Goals of Regulating Executive Compensation

Our findings also suggest new avenues for academic debates over executive compensation. As noted above, debates in law and finance proceed based on the shared normative goal of aligning pay and performance.¹¹⁷ Reform efforts like Dodd-Frank may be the result of an alignment between critics of executive compensation from two angles: that it fails to align pay with performance and that it simply pays executives too much.¹¹⁸ The findings here show one type of reform may undermine the other.

Academic debates are, of course, valuable to the extent that the result is a more refined optimal policy. In the context of executive compensation, the risk is that the academic debate is based on a normative framework that is not widely shared. Perhaps specialist opinion operates in this sphere as a constraint on political behavior. In that sense, a more detailed or refined body of specialist opinion could perhaps offer a firewall against lay opinion, though recent history suggests any such constraint is limited.¹¹⁹

Lay opinion, as we show, does not embrace agency costs. A decade ago, William Bratton suggested that concerns over shareholder value are persuasive in political discourse.¹²⁰ Our results suggest this may no longer hold. Perhaps lobbying by business interests or some other political force pushes policy toward shareholder value, but, as our

117. See Bratton, *supra* note 17, at 1559 (noting that academics make their arguments “in a tightly delimited framework” and that “[a]ll parties disassociate themselves from complaints about the level of management compensation”).

118. See *id.* at 1577–78 (“The academics wanted then, as they do now, performance sensitivity without concern about level of pay, while the populists did not care about pay level, and adopted the academics’ performance-sensitivity critique only as a means to capping executive pay.”).

119. See Romano, *supra* note 26, at 1528 (describing how Congress adopted provisions pushed by policy entrepreneurs despite “a literature at odds with their policy recommendations”).

120. See Bratton, *supra* note 17, at 1578 (“The politics of the Enron scandal show that shareholder value tends to drive national political demands. We have indeed seen a recent spate of popular outrage, but reporting breakdowns triggered this anger. Today’s populist agenda concerns compliance with laws designed to assure accurate market prices.”).

findings indicate, lay persons have minimal sensitivity to performance in general and care not at all for it when presented with the median pay ratio.

Academics committed to the agency costs framework—and likewise indifferent to absolute levels of compensation—should devote comparatively more effort into justifying that framework to a broader audience. In other words, there is a background normative debate over the appropriate framework, and the specialists are losing. Reversing that trend would be a beneficial development for corporate law and policy for those in the incentive-alignment tradition.

V. CONCLUSION

Our findings reveal lay persons evaluate executive compensation in ways starkly different from specialists. Lay persons are angered by high absolute levels of compensation, and the presence, or absence, of an agency relationship does not affect their reactions. Likewise, the section 953(b) pay ratio disclosure crowds out any effect firm performance has on how lay persons evaluate executive compensation. In this way, section 953(b) may work at cross-purposes with the normative goal among specialists to promote the alignment of pay and performance at public companies. For those committed to such alignment, our findings strengthen the case for the repeal of section 953(b).