

TO THINE OWN CEO BE TRUE: TAILORING CEO COMPENSATION TO INDIVIDUAL PERSONALITY AND CIRCUMSTANCES

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Eight-figure compensation. Cash. Restricted stock. Options. Performance shares. And more. Companies shower their CEOs with pay in large amounts, delivered in multiple ways, and dependent on complex and intricate formulae. It is all intended to motivate the top officers to make decisions that will best benefit their companies. Common sense tells us that the value of a complicated, multifaceted pay package—and hence its ability to motivate—will depend on the psychological characteristics and financial circumstances of the particular executive being paid. Economic theory and empirical studies confirm this intuition. Yet, companies generally ignore these vital factors. Substantive and disclosure law should push them to take these key variables into account.

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I. INTRODUCTION

Today's public companies¹ provide prodigious pay packages to their chief executive officers ("CEOs"). These companies pay in multiple, complicated ways. Not only do

¹ A "public company," for purposes of this Article, is one that has registered a security on a national securities exchange (such as the New York Stock Exchange or Nasdaq) under section 12(b) of the Securities Exchange Act or has registered a class of equity securities under section 12(g) because its assets and shareholder base meet or exceed the section 12(g) floor. *See* 15 U.S.C. § 78l(b) (2012); 15 U.S.C. § 78l(g) (2012).

they use salaries, but also cash bonuses and a wide variety of equity vehicles—stock options, service-based restricted stock, and performance shares. The values of the options, restricted stock, and performance shares depend on the market price of the company's stock in the future. The number of performance shares and the amounts of cash bonuses depend on multiple measures of company performance, weighted and bounded in complicated equations.

All of it is designed to motivate the top officers to make decisions that strike the right balance between caution and audacity, protection of existing company value and growth, and safety and risk. The multiple participants in the pay-setting process, and the experts they hire, earnestly seek this goal.

But no one focuses on the individual CEO they are trying to motivate: companies rarely consider the personality and financial condition of the CEO. This defies intuition, human experience, decades of economic thought, and volumes of studies. As a result, compensation is cumbersome, wasteful, and only matches well with the characteristics and circumstances of individual CEOs by luck. There must be a better way, and law can play a part in moving companies toward it.

This Article collects the theory and empirical evidence showing the connection between such individual traits as risk aversion and reaction to complex incentive schemes, on the one hand, and the value of compensation to different individuals, on the other hand. It then shows how the law can encourage use of that connection to improve CEO pay. Part II describes current top-officer compensation, particularly its complexity and the reasons for that complexity. Part III shows that companies do not design complex pay packages with the personality and financial circumstances of the CEO in mind, even though the individual personality and finances of a CEO are key factors affecting motivation. Part III then demonstrates that failure to individually tailor compensation fails to maximize incentive effects. Part IV proposes state and federal law reforms to push companies toward bringing the pay systems

and the individual characteristics together. The reforms permit experimentation, avoid regimentation, recognize that constructive change will take time, and, although giving all public companies a push, allow each to make substantive adjustments at its own pace.

II. CEO PAY TODAY

This Part begins by demonstrating that CEO compensation is complex and public companies consider it important. This Part next sets out the principal components of CEO pay packages, using CEO pay at a railroad, Norfolk Southern Corp. (“NSC”),² as a case study. To show that NSC’s pay scheme is not an aberration, this Part describes the CEO pay packages at four very different companies: computer chip manufacturer Intel;³ integrated oil and gas company Chevron;⁴ healthcare product and pharmaceutical manufacturer Johnson & Johnson (“J&J”);⁵ and financial industry giant JPMorgan Chase (“JPM”) (collectively with NSC the “Exemplar Companies”).⁶ By a summary of studies, this Part then documents that the complicated pay practices of these Exemplar Companies represent the norm. This Part concludes by arguing that these elaborate pay schemes, considered in the abstract, are rational in the sense that they are designed to motivate CEOs to pursue multiple objectives, to promote both short-term and long-term economic success, and to balance risk and caution in order to increase, rather than erode, company value.

² NSC, Annual Report (Form 10-K) (Feb. 11, 2015) [hereinafter NSC 2015 10-K].

³ Intel Corp., Annual Report (Form 10-K) (Feb. 13, 2015) [hereinafter Intel 2015 10-K].

⁴ Chevron Corp., Annual Report (Form 10-K) (Feb. 20, 2015) [hereinafter Chevron 2015 10-K].

⁵ J&J, Annual Report (Form 10-K) (Feb. 24, 2015) [hereinafter J&J 2015 10-K].

⁶ JPM, Annual Report (Form 10-K) (Feb. 24, 2015) [hereinafter JPM 2015 10-K].

A. The Intricacy and Importance of CEO Pay

Companies describe their executive pay in proxy statements per federal regulations.⁷ These regulations require a company to disclose compensation to the principal executive officer (usually the CEO), the principal financial officer, and the three other most highly compensated executive officers (collectively the “named executive officers” or “NEOs”).⁸ Companies pay particular attention to explaining the compensation paid to the CEO. An examination of the length of these disclosures, and a comparison of that length to the length of disclosures describing company financial performance, proves revealing.

Table 1 shows the number of pages that each of the Exemplar Companies devoted in its 2015 proxy statement to 2014 compensation for its NEOs. Table 1 also compares the length of that disclosure with the aggregate number of pages that each company allocated—in its Form 10-K annual report for the 2014 year—to Risk Factors,⁹ Management’s Discussion and Analysis of Financial Condition and Results of Operations,¹⁰ and Financial Statements and Supplementary Data.¹¹

⁷ 17 C.F.R. § 229.402(a)(2) & (3) (2017).

⁸ *Id.*

⁹ Form 10-K, Item 1A requires companies to discuss Risk Factors, defined as “the most significant factors that make [investment in the company] speculative or risky.” 17 C.F.R. § 229.503(c) (2017); *see* SEC, FORM 10-K ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934: GENERAL INSTRUCTIONS 8 (2012), <https://www.sec.gov/files/form10-k.pdf> [<https://perma.cc/TB5M-YKXT>] [hereinafter 10-K GENERAL INSTRUCTIONS].

¹⁰ Form 10-K, Item 7 requires companies to provide Management’s Discussion and Analysis of Financial Condition and Results of Operations, with 17 C.F.R. § 229.303 setting out the details of the disclosure. *See* 17 C.F.R. § 229.303 (2017); 10-K, *supra* note 9, at 9. The Commission has said that Management Discussion and Analysis (“MD&A”) “is intended to give the investor an opportunity to look at the company through the eyes of management by providing both a short and long-term analysis of the business of the company.” Concept Release on Management’s Discussion

TABLE 1.

Company	Pages in Proxy Statement Describing NEO Compensation	Pages in Annual Report Providing MD&A, Risk Factors, and Financial Statements & Supplementary Data	Executive Compensation Pages as % of Pages Describing Key Business Risks & Results
NSC	38 ¹²	61 ¹³	62%
Intel	28 ¹⁴	93 ¹⁵	30%
J&J	43 ¹⁶	67 ¹⁷	64%
Chevron	30 ¹⁸	74 ¹⁹	41%
JPM	34 ²⁰	254 ²¹	13%

Table 1 shows that each Exemplar Company used more than two dozen pages to explain its compensation program

and Analysis of Financial Condition and Operations, 52 Fed. Reg. 13,715, 13,717 (Apr. 24, 1987).

¹¹ Form 10-K, Item 8 requires companies to include financial statements and other financial schedules as set out in Regulation S-X, which in turn requires (among other things) that companies include in their 10-Ks audited balance sheets for the year just ended and the year before, as well as audited income statements and cash flow statements for the year just ended and the preceding two years. 17 C.F.R. §§ 210.3-01(a), -02(a) (2017).

¹² NSC, Proxy Statement (Form DEF 14A) 45–82 (Mar. 25, 2015) [hereinafter NSC 2015 Proxy Statement].

¹³ NSC 2015 10-K, *supra* note 2, at K13–K16, K21–K35, K36–K77.

¹⁴ Intel, Proxy Statement (Form DEF 14A) 37–64 (Apr. 2, 2015) [hereinafter Intel 2015 Proxy Statement].

¹⁵ Intel 2015 10-K, *supra* note 3, at 18–25, 31–50, 52–116.

¹⁶ J&J, Notice of Annual Meeting and Proxy Statement (Form DEF 14A) 29–71 (Mar. 11, 2015) [hereinafter J&J 2015 Proxy Statement].

¹⁷ J&J 2015 10-K, *supra* note 5, Ex. 13 at 1–67.

¹⁸ Chevron, Proxy Statement (Form DEF 14A) 28–57 (Apr. 9, 2015) [hereinafter Chevron 2015 Proxy Statement].

¹⁹ Chevron 2015 10-K, *supra* note 4, at 22–24, FS1–FS71.

²⁰ JPM, Proxy Statement (Form DEF 14A) 32–65 (Apr. 8, 2015) [hereinafter JPM 2015 Proxy Statement].

²¹ JPM 2015 10-K, *supra* note 6 at 8–17, 64–169, 171–308.

for top officers. These absolute numbers reflect the extreme complexity of executive pay. As a benchmark, investors believe that *a complete proxy statement*—addressing not only executive pay but also all other matters that come before the shareholders at annual meetings²²—should ideally run to only about twenty-five pages.²³ Thus, the pay structures for each of the five companies were so complicated that their explication required more pages than investors thought should be devoted to the entire document.

Table 1 also shows that four of the five Exemplar Companies devoted to the description of top officer pay 29% or more of the number of pages that they devoted to the key information on their *entire operations*. Two of the companies devoted *more than 60%* of the space they allotted to the most

²² For example, listing standards require that shareholders vote on equity compensation plans. NYSE, NYSE LISTED COMPANY MANUAL § 303A.08 (2017); NASDAQ, NASDAQ STOCK MARKET RULES § 5635(c) (2017). The Internal Revenue Code also requires that shareholders approve incentive plans so that the compensation to an executive under those plans not count toward the \$1 million limit on a company's deduction of the compensation for any given executive. 26 U.S.C. §§ 162(m)(1), (m)(4)(C)(ii) (2012). Shareholders have the right not only to propose resolutions at shareholder meetings, but—subject to certain important limitations—the right to require that a shareholder-proposed resolution appear on the proxy card that the company distributes to shareholders and to require that the company's proxy statement include the shareholders' brief statement supporting the resolutions. 17 C.F.R. § 240.14a-8 (2017). One count through June 30, 2015 tallied 536 shareholder proposals voted on at the 2015 annual meetings of U.S. companies in the Russell 3000 index. SULLIVAN & CROMWELL LLP, 2015 PROXY SEASON REVIEW 1 (July 20, 2015).

²³ See STANFORD GRADUATE SCH. OF BUS., RR DONNELLY, EQUILAR & ROCK CTR. FOR CORP. GOVERNANCE, 2015 INVESTOR SURVEY: DECONSTRUCTING PROXY STATEMENTS—WHAT MATTERS TO INVESTORS [hereinafter 2015 INVESTOR SURVEY]. The researchers surveyed “64 asset managers and owners with a combined \$17 trillion in assets” in the fall of 2014. *Id.* at 1. Respondents “report[ed] that the ideal length of a proxy is 25 pages, compared to the actual average of 80 pages among companies in the Russell 3000.” *Id.* Funds with more than \$100 billion under management said that the ideal length was thirty-three pages, and funds managing smaller portfolios identified twenty-one pages as best. *Id.* at 13.

important data on business operations. This relative comparison demonstrates the extreme importance that the companies—and the SEC, which issued the regulations prompting this torrent of words—attribute to executive compensation as a driver of firm success.

B. The Many Parts of a CEO Pay Package

CEOs may receive several different types of compensation. Although not all companies pay their CEOs in all of these ways and each element of compensation varies from company to company, here are typical components:

1. A fixed annual salary;
2. An annual incentive payment, usually in cash, with the amount of the payment dependent on the extent to which the company and/or the individual achieves specified objectives;
3. Equity,²⁴ including one or more of:
 - a. a stock option grant, which—after the CEO works through a vesting period—permits the CEO to buy stock during a set number of years at a fixed price;
 - b. a service-based restricted stock grant or restricted stock units grant, which—after the CEO continues to work at the company through a vesting period during which he or she cannot sell the shares—provides the CEO with fully tradable stock; and
 - c. a performance-share grant or performance-share-units grant, which provides the CEO with fully tradable shares of stock at the conclusion of a performance period, with the number of shares

²⁴ Equity includes all payment vehicles that ultimately provide the executive with shares of his or her company's common stock or some amount of money that is expressly equal to the market value of some number of shares of that stock at a designated time.

dependent on company financial results during that time;

4. Credits toward pension payments or other actuarially defined retirement benefits;
5. Perquisites ranging from use of a corporate airplane to financial planning; and
6. Plans or agreements that provide economic benefit to the CEO if he or she retires, is terminated, or the control of the company changes.²⁵

This Article concentrates on the second and third components, as companies tend to characterize these as “incentive compensation”—that is, compensation designed to affect the decisions that the CEO makes as he or she runs the company.²⁶

C. How Companies Combine the Components

This subpart demonstrates the current complexity of executive compensation schemes. First, it describes the compensation for the Article’s Exemplar Companies, especially NSC. The subpart then demonstrates that CEO pay packages at other public companies generally display similar intricacies.

²⁵ For useful lists and summaries of the different forms of compensation, see the SEC disclosure rule at 17 C.F.R. § 229.402 (2017). See also DAVID LARCKER & BRIAN TAYAN, CORPORATE GOVERNANCE MATTERS: A CLOSER LOOK AT ORGANIZATIONAL CHOICES AND THEIR CONSEQUENCES 214–15 (2d ed. 2016) [hereinafter LARCKER & TAYAN, GOVERNANCE MATTERS]; ROBERT W. KOLB, TOO MUCH IS NOT ENOUGH: INCENTIVES IN EXECUTIVE COMPENSATION 11–23 (2012) [hereinafter KOLB, NOT ENOUGH].

²⁶ LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 229 (“Short-term incentives offer an annual payment (usually cash) for achieving predetermined performance objectives.”); *id.* at 232 (“Long-term incentives are added to the compensation mix to encourage executives to select long-term investments that increase shareholder value.”); *id.* at 232–34 (characterizing stock options and other equity as long-term incentive vehicles).

NSC—a mundane freight railroad—compensated its top executive, Charles Moorman, for the year 2014 in multiple and complex ways.²⁷ NSC paid him cash through an annual salary and an annual cash incentive payment.²⁸ NSC also paid him equity through three different vehicles: performance share units (“PSUs”), stock options, and service-based restricted stock units (“RSUs”).²⁹

Mr. Moorman’s incentive compensation depended on two different sets of performance measures, also termed metrics. Three metrics determined his annual cash incentive payment, but one of those was subdivided into three components.³⁰ Consequently, five different measures affected his annual cash bonus, and each of the five carried a different weight. Two other metrics determined the number of shares that he ultimately received from his PSUs—with one of those measures depending not just on the performance of his own company, but also the performance of other railroads or alternatively, if NSC performed poorly by this comparison, based on NSC’s performance versus S&P 500 companies overall.³¹

The PSUs and the other two equity vehicles imposed intertemporal complexity as well. Each PSU award settled three years after grant and depended on performance over those three years.³² Each stock-option award that Mr. Moorman received provided an option that vested after four years, with a different exercise price for the options granted in each year because the exercise price for each year’s grant equaled the price of NSC stock on the date that NSC granted

²⁷ NSC 2015 Proxy Statement, *supra* note 12, at 45–82. Appendix A sets out CEO Charles Moorman’s 2014 pay package in tabular form.

²⁸ *Id.* at 54, 62.

²⁹ *Id.* at 56–59, 62.

³⁰ *Id.* at 54–56, 62.

³¹ *Id.* at 57–59. The S&P 500 “includes 500 leading companies and captures approximately 80% coverage of available market capitalization.” S&P DOW JONES INDICES, <https://us.spindices.com/indices/equity/sp-500> [<https://perma.cc/T7H9-YGKC>] (last visited May 22, 2017).

³² NSC 2015 Proxy Statement, *supra* note 12, at 57.

the option award.³³ Each award of service-based restricted stock vested after five years.³⁴ Thus, Mr. Moorman was always in three different performance cycles for his PSUs, four different vesting cycles (with different exercise prices for each) for his options, and five different vesting cycles for the restricted shares. In addition, since he could exercise his options at any time during a multi-year period after vesting, he could have at any time vested options that he could exercise immediately at as many as seven different prices, with the options terminating on as many as seven different dates.³⁵

CEO compensation at the other Exemplar Companies confirms that NSC's compensation scheme for Mr. Moorman was not uniquely complex. Appendix B provides the detail, and a summary follows.

Like NSC, Intel paid its CEO an annual cash incentive amount and made equity grants to him each year.³⁶ Intel used three metrics to determine the annual cash incentive award, with one relating to the goals at ten different corporate groups (each one of which had, in turn, three to four internal goals), for a total of thirty-four variables affecting the cash bonus. Intel made annual equity awards through two vehicles: PSUs and RSUs.³⁷ The PSUs converted to a number of common stock shares based on performance over a three-year period, as determined by a different metric than those used for the annual cash award—a complicated formula relating Intel's total shareholder return ("TSR") (dividends plus stock price appreciation) to those of peer companies.³⁸ Yearly service-based restricted stock grants vest quarterly over three years.³⁹ The Intel CEO was

³³ *Id.* at 56.

³⁴ *Id.* at 59.

³⁵ *Id.* at 68.

³⁶ Intel 2015 Proxy Statement, *supra* note 14, at 42–46, 53.

³⁷ *Id.* at 42–44, 57–59.

³⁸ *Id.* at 46, 56.

³⁹ *Id.* at 46.

therefore always in three performance cycles and twelve RSU vesting cycles.

The Chevron CEO's cash bonus depended on four different metrics, each assigned a different weight and each broken down into subparts, with the aggregate subparts totaling thirteen.⁴⁰ Chevron made equity-style awards through two vehicles: performance shares and stock options.⁴¹ Performance shares depended on the company's TSR rank among other large oil companies, with performance measured over three-year cycles.⁴² But at the end of the three years, the CEO received cash equal to the then-current market value of the number of performance shares earned, instead of the Chevron common stock itself.⁴³ An option award in each year carried an exercise price equal to the stock price at the time of grant, so that the exercise price differed from one year's option award to another year's option award.⁴⁴ The options in any given award vested over three years—one-third in each year.⁴⁵ The CEO was always therefore in three performance-share cycles and three option-vesting cycles.

J&J used three different metrics to determine the annual cash incentive award, but the 2015 proxy suggested that still other factors could play a role. The 2015 proxy provided no insight into how the company weighted the different variables.⁴⁶ J&J made annual equity awards through three vehicles: PSUs, stock options, and RSUs.⁴⁷ Five measures determined the number of common shares into which a PSU award converted at the end of each three-year performance cycle. An option award each year vested after three years, with the exercise price for any given award set at the price of

⁴⁰ Chevron 2015 Proxy Statement, *supra* note 18, at 35.

⁴¹ *Id.* at 38–40.

⁴² *Id.* at 38–40.

⁴³ *Id.* at 38, 47 tbl. n.4.

⁴⁴ *Id.* at 38, 47.

⁴⁵ *Id.* at 38.

⁴⁶ J&J 2015 Proxy Statement, *supra* note 16, at 32–33, 36, 39.

⁴⁷ *Id.* at 42–43.

J&J stock at the time of the grant.⁴⁸ The annual RSU award vested and converted into J&J common stock at the end of three years.⁴⁹ Thus, the CEO was always in three PSU performance cycles, and three cycles for vesting options and RSUs.

JPM's scheme is difficult to parse because its proxy statement is so vague. But the cash bonus *and* the number of RSUs awarded in any given year depended on five factors, one of which was "performance," which in turn divided into four factors, each of which, judging by the examples given, could be further subdivided.⁵⁰ In exercising its discretion within this construct, the compensation committee considered some unspecified multiyear period.⁵¹ An RSU award—made yearly under this system—vested over three years, with half of the award vesting after the second year and half after the third.⁵²

Market-wide surveys show that the great majority of public companies pay in similarly complicated ways. For example, one study of 100 large publicly traded U.S. companies found that in 2014, 67% used three or more metrics to determine annual bonus payments.⁵³ The same

⁴⁸ *Id.* at 42.

⁴⁹ *Id.* at 43.

⁵⁰ JPM 2015 Proxy Statement, *supra* note 20, at 38–39, 42.

⁵¹ *Id.* at 38–39, 50.

⁵² *Id.* at 50.

⁵³ CLEARBRIDGE COMP. GRP., THE CLEARBRIDGE 100 REPORT: ANNUAL AND LONG-TERM INCENTIVE DESIGN PRACTICES FOR EXECUTIVES 5 (2015) [hereinafter CLEARBRIDGE 100 REPORT]. This count may actually understate the number of metrics, particularly those determining the annual cash incentive awards, because surveys typically count separately only the financial metrics that companies employ. When non-financial measures are included (such as the three incorporated into the composite service measure that counted towards Mr. Moorman's annual cash award), the count can be higher. One survey of 200 large U.S. companies found that, when non-financial measures were included with financial measures, 52% of the companies used four or more measures to determine short-term incentive payments and 30% used six or more. JAMES F. REDA ET AL., STUDY OF 2013 SHORT- AND LONG-TERM INCENTIVE DESIGN CRITERION AMONG TOP 200 S&P 500 COMPANIES 16 (2014) [hereinafter REDA,

study found that 43% used two long-term incentive vehicles, and that 33% used three vehicles.⁵⁴ Forty percent of those making long-term incentive grants used two metrics to determine the amount ultimately provided to the top officer, and another 24% used three or more.⁵⁵ The study also found that 85% awarded performance shares or PSUs, with 92% of those using a three-year performance cycle.⁵⁶ The majority of companies vested both stock options and service-based restricted stock (or RSUs) over three years.⁵⁷ Of those companies surveyed, 30% used *only* a relative measure to determine long-term incentive awards, while 23% combined both a relative metric and an absolute measure—that is, one dependent solely on the performance of the company at which the executive worked.⁵⁸

In sum, companies employ multiple metrics to determine annual and long-term incentives, multiple equity vehicles for long-term rewards, multiyear cycles for long-term performance measurement,⁵⁹ multiyear vesting for options,

INCENTIVE DESIGN]; *id.* at 4 (study based on “the 2014 annual proxy statement disclosures for 200 of the top U.S. companies (based on revenue and market capitalization)”).

⁵⁴ CLEARBRIDGE 100 REPORT, *supra* note 53, at 8.

⁵⁵ *Id.* at 11.

⁵⁶ *Id.* at 10.

⁵⁷ *Id.* at 9.

⁵⁸ *Id.* at 12 (“Among awards that include a non-stock-based measure (i.e., a financial/strategic/operating performance measure), the majority (83%) are measured on an absolute basis only. However, *among awards that use a stock-based measure (e.g., stock price, TSR), performance is overwhelmingly measured on a relative basis only (88%).*”) (emphasis added).

⁵⁹ See Ryan Colucci et al., *Changing Practices in Executive Compensation: Annual Incentive Plan Design*, CAP FLASH, Jan. 15, 2015, at 1 (reporting results from a review of proxy statements from 100 companies in the Fortune 500); *id.* at 3 (“25% of companies disclose using two (2) metrics in their annual incentive programs, 25% use three (3) metrics, and 21% of companies use four (4) or more metrics.”); Michael Biagi et al., *Changing Practices in Executive Compensation: Long-Term Incentive Plan Design*, CAP FLASH, Feb. 12, 2015, at 1 [hereinafter CAP Flash, *Long-Term Incentive Design*] (reporting results from a review of

and multiyear vesting for service-based restricted stock.⁶⁰ Half or more use a relative measure to determine, in whole or in part, the amount of long-term incentive compensation,

proxy statements from 100 companies in the Fortune 500); *id.* at 2 (“Companies continue to use multiple vehicles to deliver LTI to executives. 51% of companies in our study deliver LTI in the form of two vehicles, 29% use three vehicles and 20% use only one vehicle. . . . In our study, most companies with performance-based LTI plans use two metrics.”); EQUILAR, INC., PERFORMANCE METRICS IN ANNUAL INCENTIVE PLANS 1, 3 (2014) (analyzing random sample of 50 companies from the S&P 500 filing proxy statements between January 1 and April 20, 2013 and finding 31 companies using two or more financial or market-based metrics, with 27 using two or three); EQUILAR, INC., MEASURING LONG-TERM PERFORMANCE: AN ANALYSIS OF S&P 500 EQUITY INCENTIVE PLAN METRICS 1 (2014) [hereinafter EQUILAR, MEASURING LONG-TERM PERFORMANCE] (“[E]xamin[ing] the long-term (performance period greater than one year) performance-based equity granted to CEOs in the S&P 500 over the past three years . . .” and providing graph showing that a bit over 60% of the companies used two or more metrics for long-term incentive compensation); MERIDIAN COMP. PARTNERS, LLC, 2013 TRENDS AND DEVELOPMENTS IN EXECUTIVE COMPENSATION 4 (2013) [hereinafter MERIDIAN, 2013 TRENDS IN EXECUTIVE COMPENSATION] (reporting survey responses from 136 companies); *id.* at 13 (stating that a “strong majority of responding companies (76%) continue to utilize two or more performance metrics,” with graph showing 29% using three metrics and 4% using four or more); *id.* at 20 (stating that “[e]ighty-five percent (85%) of respondents are actively using 2 or 3 LTI vehicles in 2013 for senior executives” and providing a table showing that the most popular vehicles are stock options or stock appreciation rights, performance shares or PSUs, and time-vesting restricted stock or RSUs); *id.* at 22 (“The great majority of long-term performance plans use a 3-year performance period (87%). . .”).

⁶⁰ REDA, INCENTIVE DESIGN, *supra* note 53, at 23. Stock options vested “[t]ypically over three years (56%) or four years (34%) with a ten-year term (86%) or seven-year term (11%),” with restricted stock or RSUs vesting “[t]ypically over the three years (67%) or four years (23%),” and 71% of performance-based awards vesting at the end of a three-year performance period. *Id.* The study also reported that 72% of the companies used two or more measures for long-term incentive compensation, with 32% using three or more. *Id.* at 16. As to the set of vehicles used as long-term incentives, “[t]he most common combinations are a mix of stock options and performance-based awards (34%) followed by a blend of stock options, time-vested stock, and performance-based awards (29%).” *Id.* at 21, 22.

with a TSR comparison of the executive's company to that of other companies most popular.⁶¹

D. What Companies Are Trying to Do

Companies design these elaborate compensation schemes to motivate their top officers to make decisions that will benefit the companies. Each company wants to focus its executives on those aspects of the firm's business, and its financial results, central to short-term success. Nonetheless, companies also want their CEO to focus on long-term financial performance and to align their CEO's interests with those of the company's shareholders.

Thus, Mr. Moorman's annual cash incentive payment for 2014 depended on (i) NSC's operating income for the year (railway operating revenues minus railway operating expenses (e.g., compensation, fuel, and depreciation)); (ii) NSC's operating ratio for the year (essentially the cost, in operating expenses, to generate a dollar in operating revenue); and (iii) a composite service measure (broken down into (a) adherence to operating plan, (b) connection

⁶¹ EQUILAR, MEASURING LONG-TERM PERFORMANCE, *supra* note 59, at 2 ("Relative TSR continues to be the most popular long-term performance metric, appearing in 57.7% of 2013 plans . . ."); CAP Flash, *Long-Term Incentive Design*, *supra* note 59, at 3 ("Overall, 49% of companies in our study measure performance relative to the external market (typically using TSR) Approximately 92% of companies that use TSR, measure performance relative to a defined comparator group (54% use a defined peer group, 40% use a broader industry index and 6% use both) . . ."); MERIDIAN, 2013 TRENDS IN EXECUTIVE COMPENSATION, *supra* note 59, at 23 ("Sixty-four percent (64%) of performance plans use a relative performance metric in 2013, up from 49% in 2012. For those companies, relative performance metrics are weighted 79% on average for the performance plan. Also, of such plans, approximately 82% use TSR performance relative to a peer group or index."); REDA, INCENTIVE DESIGN, *supra* note 53, at 17 ("Of the 185 companies with LTIPs, 61% used at least one relative measure in their 2013 LTIP design, slightly higher than last year's 59%. . . . Eighty-one percent (81%) of these companies used TSR as the relative measure in 2013 . . .").

performance, and (c) train performance).⁶² Roughly, the company provided a cash incentive for making a profit, getting the most out of each dollar spent in making that profit, and running the trains well.

To stretch his horizon out beyond one year, NSC awarded Mr. Moorman PSUs with a three-year performance cycle and the number of shares he would ultimately receive at the end of the cycle depending on (i) the three-year average of after-tax return on average invested capital and (ii) NSC's TSR versus the TSR of comparable railroads, or alternatively, if NSC fared poorly against the other railroads, the TSR for the S&P 500 companies.⁶³ Roughly, the PSU grants provided an equity incentive for getting the most profit out of the money put into the company and providing a return to shareholders better than the return they could earn by investing their money in other railroads; or if not, at least a greater return than if they invested in a diversified portfolio of other large American businesses.

Thus, the logic of the several incentives was internally consistent. And the multiple metrics determining Mr. Moorman's rewards arguably reflected several different ways of thinking about NSC's success. Moreover, the many metrics might have prevented him from fixating on one alone, to the detriment of others that were also important.⁶⁴

⁶² NSC 2015 Proxy Statement, *supra* note 12, at 54–56.

⁶³ *Id.* at 57–59.

⁶⁴ See CAROL BOWIE ET AL., ISS, EVALUATING PAY FOR PERFORMANCE ALIGNMENT 15 (2014) [hereinafter ISS PAY/PERFORMANCE ALIGNMENT] (“Use of a single metric, or very similar metrics, in either or both of the short- and long-term incentive programs may suggest inappropriate focus on one aspect of business results at the expense of others.”); GLASS LEWIS & CO., PROXY PAPER GUIDELINES: 2015 PROXY SEASON, AN ANALYSIS OF THE GLASS LEWIS APPROACH TO PROXY ADVICE UNITED STATES 28 (2015) [hereinafter GLASS LEWIS 2015 GUIDELINES] (stating that Glass Lewis uses “five performance metrics” in its own computations to determine the alignment of executive pay with company performance); *id.* at 29 (reporting Glass Lewis's belief that a “well-structured” long-term incentive plan should have “[t]wo or more performance metrics” and adding: “While cognizant of the inherent complexity of certain performance metrics, Glass

Using a mix of both service-based restricted stock and stock options made sense too. Theoreticians suggest that such a mix can subtly adjust the differing incentives that each vehicle provides in order to strike an optimum balance. Thus, stock options reward executives for taking risks to increase stock price.⁶⁵ Service-based restricted stock encourages more cautious decisions that preserve a stock's existing value.⁶⁶ The proper mix of options and restricted stock might, in theory, lead the top executive to make decisions that are usefully aggressive but still appropriately cautious.⁶⁷ Companies seem to attempt this balance.⁶⁸

Lewis generally believes that measuring a company's performance with multiple metrics serves to provide a more complete picture of the company's performance than a single metric; further, reliance on just one metric may focus too much management attention on a single target and is therefore more susceptible to manipulation").

⁶⁵ A stock option is the right, but not the obligation, to purchase stock at the exercise price after the option vests but before it expires. The exercise price is almost always the price of the stock on the date of the option grant. Thus, the executive granted an option at the time that his or her company's stock price is \$X/share has an incentive to take on risk in order to increase the price of the company's stock above \$X/share after the option vests but before the option expires. If the risk produces that result, the executive makes money by exercising the option for \$X and selling the stock into the market for its price above \$X. On the other hand, if the risk reduces the price of the stock below \$X, the executive has not lost any money because he or she simply does not exercise the option at all.

⁶⁶ Restricted stock converts to common stock after vesting—regardless of the price of the common stock at that time and without the executive paying the company for the removal of the restrictions. Thus, if the price of the stock is \$X at the time of grant and the executive causes the company to take on risk that lowers the price, the executive suffers a real loss in the value of the restricted stock.

⁶⁷ See KOLB, NOT ENOUGH, *supra* note 25, at 87 (“[E]conomic theory finds . . . that holdings of [stock options] generally increase the CEO's willingness to take risk, and that very large holdings of restricted stock can lead executives to be unwilling to take risks.”); *id.* at 105 (“The firm needs to set an executive pay package that incentivizes risk-taking in the right amount and in the right way. . . . Ideally, the right mix of [stock options] and restricted stock in a pay package can provide the right incentives . . .”).

Finally, all of the equity components of his compensation—the stock options, the service-based restricted stock, and the performance shares—aligned Mr. Moorman’s interests with those of the other NSC shareholders. That is, since the ultimate value of each of these vehicles depended on the price of NSC’s stock, each one motivated him to take actions that would increase the price of that stock.⁶⁹ Such a stock price increase would not only benefit Mr. Moorman, but all other NSC shareholders as well. Research supports the notion that such an alignment works. Studies find a positive association between significant top executive ownership of company stock and company financial performance.⁷⁰

The seeming rationality of the current system rests, however, on abstract design. Nothing in the description just

⁶⁸ *Id.* at 106 (“These reflections on the incentive effects of stock holdings and [stock options] are broadly consistent with the executive pay packages observed across the corporate landscape. They almost all utilize a mix of both restricted stock and [stock options] as incentivizing and restraining elements in the CEO’s pay package.”).

⁶⁹ LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 247 (“In theory, executives who hold equity in the companies they manage—either directly in the form of stock ownership or indirectly through options, restricted stock, or performance shares—have greater incentive to improve the economic value of the firm.”).

⁷⁰ For example, two researchers studied the effect of CEO stock ownership on abnormal stock returns, using data on publicly traded companies covering the period January 1988 to June 2010. Ulf Von Lilienfeld-Toal & Stefan Ruenzi, *CEO Ownership, Stock Market Performance, and Managerial Discretion*, 69 J. FIN. 1013, 1022 (2014). The researchers defined CEO ownership in two different ways, in one of which they computed the percentage of total outstanding common stock held by the CEO, then ranked firms, top to bottom, by that percentage. *Id.* at 1021. After controlling for other factors, they found that even firms in the mid-60s percentiles of that ranking outperformed firms with low CEO ownership to an economically significant extent and by results that were statistically significant. *Id.* at 1026–28 & tbl.III. *See also* LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 249 (summarizing other studies and concluding that “[r]esearch generally supports the notion that equity ownership [by executives] is positively associated with firm performance”).

given says anything about the individual to be motivated—Mr. Moorman’s personal risk tolerance, his current financial condition, or the extent to which his wealth was already concentrated in NSC stock. Instead, the description suggests that the pay package at NSC was designed to motivate *whoever* occupied the CEO post to make the *same* decisions that would bring short- and long-term prosperity to the railroad and its owners. This over-concentration on design and under-concentration on the individual is a central error, as the next Part shows.

III. WHY CURRENT CEO PAY IS FUNDAMENTALLY IRRATIONAL

This Part demonstrates that current elaborate pay schemes do not take account of the characteristics and financial circumstances of individual CEOs. The Part then shows that those characteristics and circumstances are vitally important to determining whether a company’s compensation arrangements in fact motivate a particular CEO or not.

A. Failure to Take Account of Individual CEO Personalities and Circumstances

Federal regulations require that each company include in its Compensation Disclosure and Analysis (“CD&A”) “[w]hy [it] chooses to pay each [type of compensation],” “[h]ow [the company] determines the amount” of each type of compensation, “the basis for allocating [long-term] compensation to each different type of award,” and “[t]he factors considered in decisions to increase or decrease compensation materially.”⁷¹ Accordingly, if a company is selecting a type of compensation or determining the amount of compensation on the basis of a CEO’s individual characteristics or circumstances, the law requires that the

⁷¹ 17 C.F.R. § 229.402(b)(1)(iv), (v) (2017); *id.* §229.402(b)(2)(iii), (ix) (2017).

company disclose that fact. No CD&A of any Exemplar Company stated that the firm considered, when designing or setting its CEO compensation, any aspect of its top executive's personality or any aspect of his or her current financial condition.⁷² It is therefore fair to conclude that none of them did.

Two sets of experts typically affect top officer pay. The companies hire one set, called compensation consultants. The shareholders hire another, called proxy advisers.

The board of directors, with the compensation committee of the board playing a key role in the process, set the CEO pay at each of the Exemplar Companies.⁷³ Stock exchange listing standards require that boards and their compensation

⁷² See NSC 2015 Proxy Statement, *supra* note 12, at 45–61; Intel 2015 Proxy Statement, *supra* note 14, at 37–51; J&J 2015 Proxy Statement, *supra* note 16, at 30–53; Chevron 2015 Proxy Statement, *supra* note 18, at 24–43; JPM 2015 Proxy Statement, *supra* note 20, at 32–57. There are some exceptions outside the exemplars. Netflix effectively lets executives express their individual natures by permitting each one of them, individually, to allocate his or her total compensation figure between cash, stock options, and performance-based bonuses. Netflix, Inc., Proxy Statement (Form DEF 14A) 29 (Apr. 27, 2016); *see also* DAVID LARCKER & BRIAN TAYAN, A REAL LOOK AT REAL WORLD CORPORATE GOVERNANCE 141–43 (2013) (“The Netflix approach to compensation is highly unique and intended to solve traditional problems relating to the economic efficiency and incentive value of compensation.”).

⁷³ NSC 2015 Proxy Statement, *supra* note 12, at 41 (duties of the Compensation Committee include “considering and recommending to the independent members of the Board the compensation of the chief executive officer”); Intel 2015 Proxy Statement, *supra* note 14, at 22 (“The Compensation Committee is responsible for determining compensation for Intel executives (including our CEO and our Chairman)”); J&J 2015 Proxy Statement, *supra* note 16, at 12 (“The *Compensation & Benefits Committee* is responsible for . . . reviewing and recommending for approval by the independent Directors of the Board, the compensation for our Chief Executive Officer”); Chevron 2015 Proxy Statement, *supra* note 18, at 17 (the Management Compensation Committee “[r]eviews and recommends to the independent Directors the salary and other compensation for the CEO”); JPM 2015 Proxy Statement, *supra* note 20, at 44 (“Based on [CEO] Dimon’s 2014 performance, the [Compensation & Management Development Committee] awarded Mr. Dimon total annual compensation of \$20 million”).

committees play this key role.⁷⁴ But the compensation committees at four of the five Exemplar Companies hired an outside compensation consultant to help the board set the pay,⁷⁵ as both federal law and stock exchange listing standards anticipate but do not demand.⁷⁶ The 80% of

⁷⁴ *E.g.*, NYSE, NYSE LISTED COMPANY MANUAL § 303A.05(b)(i)(A) (2017) (requiring that the compensation committee have a written charter that sets out its responsibilities, one of which is to: “[R]eview and approve corporate goals and objectives relevant to CEO compensation, evaluate the CEO’s performance in light of those goals and objectives, and, either as a committee or together with the other independent directors (as directed by the board), determine and approve the CEO’s compensation level based on this evaluation”); NASDAQ, NASDAQ STOCK MARKET RULES § 5605 (d)(2) (2017) (requiring each listed company to have a compensation committee); *id.* at (d)(1) (requiring that the committee have a written charter and that the charter state “the compensation committee’s responsibility for determining, or recommending to the board for determination, the compensation of the chief executive officer”).

⁷⁵ NSC 2015 Proxy Statement, *supra* note 12, at 16 (reporting that the company “designed our executive compensation program with advice from its compensation consultant”); *id.* at 42 (“In setting such compensation for the directors and the chief executive officer, the Compensation Committee considers the recommendations of the compensation consultant.”); Intel 2015 Proxy Statement, *supra* note 14, at 22 (reporting that the “Compensation Committee retains an independent executive compensation consultant, Farient Advisors LLC, to provide input, analysis, and advice about Intel’s executive compensation philosophy, peer groups, pay positioning (by pay component and in total), compensation design, equity usage and allocation, and risk assessment under Intel’s compensation programs”); Chevron 2015 Proxy Statement, *supra* note 18, at 42 (reporting that its “[Management Compensation Committee] retains an independent compensation consultant—Meridian Compensation Partners LLC—to assist it with its duties”); J&J 2015 Proxy Statement, *supra* note 16, at 12 (“The Compensation & Benefits Committee has retained Frederic W. Cook & Co., Inc. (FWC) as its independent compensation consultant for matters related to executive officer and Non-Employee Director compensation.”).

⁷⁶ Recognizing the widespread use of compensation consultants, law, regulation, and listing standards provide that compensation committees must have authority to hire them, and if a consultant is hired, that committee must control the selection and evaluation of the consultant and oversee its work. See 15 U.S.C. § 78j-3(e) (2012), with implementing regulation at 17 C.F.R. § 240.10C-1(b)(3) (2017) and complementary listing

Exemplar Companies retaining compensation consultants almost exactly mirrors the percentage of all large public companies using such consultants.⁷⁷

Federal regulations require that companies describe the role that compensation consultants play.⁷⁸ None of the four Exemplar Companies that reported employing a compensation consultant described the consultant's tasks as including an evaluation of the personality of the company's CEO.⁷⁹ None of them reported asking the consultant to collect and summarize information on the CEO's personal financial circumstances.⁸⁰ None of them reported seeking advice from the consultant about tailoring compensation to the CEO's wealth or aversion to risk in personal financial affairs or the CEO's reaction to complexity in compensation.⁸¹

Shareholders at each public company express their views on compensation by voting for or against "say-on-pay" resolutions ("SOPRs"), by which companies ask owners for approval of the pay to their NEOs.⁸² Even though the votes

standards at NYSE, NYSE LISTED COMPANY MANUAL § 303A.05(c)(iii) (2017) and NASDAQ, NASDAQ STOCK MARKET RULES § 5605(d)(3)(C) (2017).

⁷⁷ NAT'L ASS'N OF CORP. DIRS, 2015–2016 NACD PUBLIC COMPANY GOVERNANCE SURVEY 4 (2015) (report compiled from 1034 public company responses, supplemented by data compiled by Equilar, a company that collects and organizes executive compensation information); *id.* at 17 (the boards at 79% of companies with capitalization of \$10 billion or more—and from which responses to this question were obtained—reported receiving a presentation from a compensation consultant).

⁷⁸ 17 C.F.R. § 229.407(e)(3)(iii) (2017).

⁷⁹ See NSC 2015 Proxy Statement, *supra* note 12, at 47–48; Intel 2015 Proxy Statement, *supra* note 14, at 22; Chevron 2015 Proxy Statement, *supra* note 18, at 42; J&J 2015 Proxy Statement, *supra* note 16, at 48.

⁸⁰ See NSC 2015 Proxy Statement, *supra* note 12, at 47–48; Intel 2015 Proxy Statement, *supra* note 14, at 22; Chevron 2015 Proxy Statement, *supra* note 18, at 42; J&J 2015 Proxy Statement, *supra* note 16, at 48.

⁸¹ See NSC 2015 Proxy Statement, *supra* note 12, at 47–48; Intel 2015 Proxy Statement, *supra* note 14, at 22; Chevron 2015 Proxy Statement, *supra* note 18, at 42; J&J 2015 Proxy Statement, *supra* note 16, at 48.

⁸² 15 U.S.C. § 78n-1(a) (2012), *with implementing regulations at* 17 C.F.R. § 240.14a-4(b)(3), § 240.14a-21 (2017).

are non-binding, companies pay attention to the results, and a company may change its executive compensation arrangements when the percentage of shares voted in favor of its SOPR falls below 70%.⁸³ Proxy advisory firms influence the votes of many institutional investors on these resolutions.⁸⁴ Since companies know this to be so, many of them attempt to design their pay schemes so that proxy advisers will support their SOPRs.⁸⁵

⁸³ A study of 2011 votes on say-on-pay found that 55% of the companies whose resolutions garnered an ISS negative recommendation that year made changes in their compensation plans the next year in response to the vote, with the responsiveness well correlated to whether the percentage of shares voted against the resolution exceeded the 30% level identified by ISS as the level that should trigger particular concern. Yonca Ertimur et al., *Shareholder Votes and Proxy Advisors: Evidence from Say on Pay*, 51 J. ACCT. RES. 951, 984–86 (2013).

⁸⁴ A study of votes in 2011 on say-on-pay resolutions found a negative Institutional Shareholder Services (“ISS”) recommendation associated with an almost 25% increase in “no” votes and a negative recommendation by both ISS and Glass Lewis associated with a more than 38% increase in “no” votes. *Id.* at 951, 953. The study analyzed votes at 1275 firms in the S&P 1500, *id.* at 953, and controlled for the percentage of shares held by blockholders (i.e., owners with more than 5% of outstanding shares), as well as abnormal returns, CEO total pay, growth in CEO pay, and total percentage of institutional shareholding, *id.* at 975–77.

⁸⁵ A survey of 110 companies in late 2011 found that 70% of “compensation programs were influenced by the guidance received from proxy advisory firms or by the policies of those firms.” David F. Larcker et al., The Conference Bd., *The Influence of Proxy Advisory Firm Voting Recommendations on Say-on-Pay Votes and Executive Compensation Decisions*, DIRECTOR NOTES FROM THE CONFERENCE BOARD, Mar. 2012, at 3, 4. And many companies regularly themselves, or with the help of outside consultants, run their top executive compensation through models simulating the models that the major proxy advisors employ to help determine whether to recommend a vote for or against a company’s SOPR. MERIDIAN, 2013 TRENDS IN EXECUTIVE COMPENSATION, *supra* note 59, at 9 (“In 2013, the majority of respondents (73%) replicated ISS’s quantitative Pay-for-Performance tests in order to prepare for ISS’s evaluation.”).

The two most powerful proxy advisory firms are ISS and Glass Lewis.⁸⁶ Both employ a long and complex analysis to determine whether to recommend voting for or against each public company's SOPR.⁸⁷ Both base their recommendations significantly on ratios and equations.⁸⁸ Both hunt for specific contract provisions that the proxy advisor deems questionable.⁸⁹ Both set out preferred compensation

⁸⁶ ISS clients manage \$25 trillion in assets and Glass Lewis clients manage \$15 trillion. LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 364.

⁸⁷ See ISS, 2015 U.S. COMPENSATION POLICIES: FREQUENTLY ASKED QUESTIONS 14–33 (2015) [hereinafter ISS 2015 FAQ COMPENSATION]; ISS PAY/PERFORMANCE ALIGNMENT, *supra* note 64; GLASS LEWIS 2015 GUIDELINES, *supra* note 64.

⁸⁸ In 2015, ISS used a model with three screens: (i) “Relative Degree of Alignment,” which “compare[d] the percentile ranks of a company’s CEO pay and [total shareholder return] performance, relative to an industry-and-size derived comparison group, annualized for the prior three fiscal year periods”; (ii) “Multiple of Median,” which “expresse[d] the prior year’s CEO pay as a multiple of the median pay of its comparison group for the same period”; and (iii) “Pay-TSR Alignment,” which was an “absolute measure compar[ing] the trends of the CEO’s annual pay and the value of an investment in the company over the prior five-year period.” ISS 2015 FAQ COMPENSATION, *supra* note 87, at 15. Glass Lewis’ “model benchmark[ed] . . . executives’ pay and company performance against peers selected using Equilar’s market-based peer groups and across five performance metrics. By measuring the magnitude of the gap between two weighted-average percentile rankings (executive compensation and performance), [Glass Lewis] grade[d] companies based on a school letter system: ‘A,’ ‘B,’ ‘F,’ etc.” GLASS LEWIS 2015 GUIDELINES, *supra* note 64, at 28.

⁸⁹ ISS looked for such pay arrangements as “[c]ontracts containing multi-year guarantees for salary increases, non-performance based bonuses, or equity compensation,” “[i]nclusion of performance-based equity or other long-term awards in the pension calculation,” “[c]hange in control cash payments exceeding 3 times base salary plus target/average/last paid bonus,” and “[d]ividends or dividend equivalents paid on unvested performance shares or units.” ISS 2015 FAQ COMPENSATION, *supra* note 87, at 29–30. Glass Lewis looked for such “problematic contractual payments, . . . as guaranteed bonuses,” GLASS LEWIS 2015 GUIDELINES, *supra* note 64, at 27, and “egregious pay practices” like “large one-off payments [or] the inappropriate, unjustified use of discretion.” *Id.* at 28.

practices, some quite prescriptive.⁹⁰ But neither the ISS nor Glass Lewis analysis says a word about the personalities or financial circumstances of individual CEOs.

In sum, while each company creates its own compensation package for its CEO and while the packages, though sharing complexity, are each somewhat different, the companies do not tailor compensation to the psychological traits and financial circumstances of their top executives. The companies do not ask the experts they hire to so tailor that compensation. The experts advising the shareholders do not evaluate CEO compensation to determine whether the pay package fits the individual.

B. Why the Failure Renders CEO Compensation Irrational

Motivation is inherently individual. Intuitively, we sense that what motivates one person effectively may not motivate another, or may motivate him or her but poorly. Gut instinct counsels that designing a scheme to motivate a man or woman without taking into account that individual's personality and financial circumstances is unlikely to yield optimal results.

Theorists have thought about executive compensation, and researchers have studied it, for decades. While their models and findings support different design features of modern CEO pay, this Article concentrates on the virtual consensus that whether a given kind or amount of compensation motivates well or not depends critically on the characteristics and financial condition of the individual executive who receives the pay.

This subpart shows, first, that different executives react differently to pay complexity. It demonstrates, second, that

⁹⁰ See *supra* note 64 (noting ISS opposition to use of a single metric in either short-term or long-term incentive formulae). Glass Lewis favored, for short-term incentives, “a mix of corporate and individual performance measures” and, for long-term incentives “[p]erformance periods of at least three years” and “[t]wo or more performance metrics.” GLASS LEWIS 2015 GUIDELINES, *supra* note 64, at 28–29.

the value of contingent equity varies according to an individual executive's personal financial risk aversion and the proportion of his or her wealth already comprised of company equity. It argues, third, that the amount of company equity an executive owns profoundly affects whether an *additional* grant of contingent equity *increases* the alignment of the executive's interests with those of other shareholders. Finally, the subpart observes that an individual executive's total wealth may have a profound impact on whether the financial incentives available to a company can motivate the executive at all.

1. Individual Response to Complexity in Compensation

The complexity of modern CEO compensation described in Part II can produce at least two problems. First, complexity can so degrade the executive's confidence in the connection between his or her decisions and the pay he or she receives that the complexity itself reduces both the value that the executive attributes to the pay package and motivation that the package provides. Second, laundry lists of metrics can load a pay package with a dozen or more variables, each of which will affect a CEO's pay very slightly, and may distract the executive rather than incentivize. In each case, the personality of the executive determines whether the complexity works to the paying company's advantage or disadvantage.

a. Complexity and Executive Confidence in the Connection Between Decisions and Pay Results

Behavioral theory concentrates on an officer's "perception of the (subjectively calculated) *value* of an incentive award," which "will typically be less than the award's (objectively

calculated) economic value”⁹¹ “for reasons of economic psychology . . . rather than rational choice.”⁹² Behaviorists posit that the worth of an incentive payment *to the executive* depends on that particular executive’s beliefs about a series of connections: CEO action → company performance → incentive reward → value of that reward.⁹³ Whether an incentive motivates depends on the executive’s confidence that (i) the connections exist at all, (ii) the connections are strong, and (iii) the executive can successfully estimate that strength. For some executives, complexity can reduce that confidence, and thereby reduce the subjective value that he or she places on the incentive and the motivation it instills.

For example, consider Mr. Moorman in 2014. His annual bonus at NSC depended 50% on the company’s operating income, 35% on its operating ratio, and 15% on a composite service measure, which itself depended 30% on adherence to operating plan, 30% on connection performance, and 40% on train performance.⁹⁴ For purposes of the annual incentive

⁹¹ ALEXANDER PEPPER, THE ECONOMIC PSYCHOLOGY OF INCENTIVES: NEW DESIGN PRINCIPLES FOR EXECUTIVE PAY 33 (2015) [hereinafter PEPPER, PSYCHOLOGY OF INCENTIVES BOOK] (emphasis added).

⁹² *Id.* at 61.

⁹³ Theorists express this connection in an equation and with academic terms. See Alexander Pepper & Julie Gore, *The Economic Psychology of Incentives: An International Study of Top Managers*, 49 J. WORLD BUS. 350, 352 (2014) [hereinafter Pepper & Gore, *Psychology of Incentives Article*]. Of course, a board might use a complex formula to measure a CEO’s performance rather than to motivate particular decisions, in which case the effect on incentives would be either irrelevant or incidental. But that is not why companies use these complicated systems. They are explicitly incentives. Thus, NSC called its annual award to Mr. Moorman an “Annual Incentive,” with the company “set[ting] performance levels required to achieve 100% of the annual incentive opportunity so that the full bonus is only earned in years where our results are exceptional.” NSC 2015 Proxy Statement, *supra* note 12, at 55. Similarly, the company called all of its equity compensation “Long-Term Incentive Awards,” explaining that it “allocated 2014 long-term incentive awards 35% as stock options, 15% as restricted stock units, and 50% as performance share units.” *Id.* at 56.

⁹⁴ NSC 2015 Proxy Statement, *supra* note 12, at 54–56.

payment, NSC measured each of these variables over the single year for which NSC was awarding the bonus.⁹⁵ Mr. Moorman's PSUs, on the other hand, depended on rolling three-year cycles, with the number of shares transferred to Mr. Moorman at the end of each cycle depending (i) 50% on return on invested capital during the cycle's three years and (ii) 50% on NSC's TSR over those three years, compared with the TSR for comparable railroads, or alternatively, with the TSR for the S&P 500.⁹⁶

Now think whether Mr. Moorman could confidently draw a straight line between an executive decision that he faced and the value he personally would reap from his compensation package. Suppose that, at the beginning of 2014, Mr. Moorman considered whether to either (a) make a major capital investment in new locomotives and freight cars to replace locomotives and cars ("rolling stock") in the NSC fleet,⁹⁷ or (b) not to make that investment. To simplify discussion, assume immediate delivery of the new rolling stock. Further, assume that this capital investment (i) would not lead to an increase in railroad revenue in the current year but would lead to an increase in future years; (ii) would increase depreciation expense in the current and future years; (iii) would not reduce maintenance expenses in the current year (as employees would have to devote time to learning new maintenance protocols), but would reduce maintenance expenses in future years; and (iv) would increase average invested capital in the current and future years.⁹⁸

The complicated performance formulae determining Mr. Moorman's annual bonus and the number of shares he

⁹⁵ *Id.*

⁹⁶ *Id.* at 57–59.

⁹⁷ At the end of 2014, NSC owned more than 4200 locomotives and more than 71,000 freight cars. NSC 2015 10-K, *supra* note 2, at K9.

⁹⁸ *See id.* at K35 ("As a capital-intensive company, we have most of our capital invested in such property. The replacement cost of these assets, as well as the related depreciation expense, would be substantially greater than the amounts reported on the basis of historical cost.").

ultimately would receive from PSU grants could only affect Mr. Moorman's decision on this possible capital investment if Mr. Moorman knew the effect of his decision on that bonus and on the number of shares he ultimately would obtain through his PSU grants. If he did not know how the decision would affect his compensation, then the formulae determining that effect could not guide his decision. In that event, at least with respect to this particular decision, the incentives would be useless.

Under the assumptions set out above, there is a good chance that in 2014, Mr. Moorman would have had *little* confidence that he could predict the effect of his decision on his incentive compensation. If he decided to buy the new rolling stock, that capital investment would decrease the company's operating income and increase its operating ratio in the current year.⁹⁹ Both of those numerical changes would *decrease* Mr. Moorman's annual bonus for 2014. But the capital investment might improve connection and train performance, which would in turn *increase* Mr. Moorman's 2014 cash bonus. Mr. Moorman would therefore need to perform a multidimensional computation to determine the net effect on his annual 2014 cash incentive payment of the decision to buy the new locomotives and freight cars. Of course, looking ahead to future years, he would have to estimate the effect of the capital investment on his annual cash incentive payments in those later annual cycles. The effect on those more distant payments would be different than the effect in 2014, as the new rolling stock would decrease maintenance costs in those years, and hopefully contribute to better service that would increase revenue. Thus, operating income would increase and, together with

⁹⁹ Under these assumptions, the investment does not affect maintenance or increase revenues in the first year but does increase depreciation, which has the net effect of reducing operating income. See *infra* note 278. Since the increase in depreciation increases the numerator in the calculation of operating ratio, see *infra* note 279, and since the investment does not increase revenue in the first year (the denominator in the ratio), the net effect is to increase the ratio.

lower maintenance costs, drive the operating ratio down. But whether those gains would swamp the effect of the increased depreciation cost—which would continue to drag down operating income and increase operating ratio—might well be unclear.

Complex and uncertain as these calculations would be, they would only begin Mr. Moorman’s quest to compute how buying new freight cars and locomotives would affect his overall compensation. Turning to his PSU grants, he would have to consider each of the three-year PSU cycles then underway. For each cycle, Mr. Moorman would have to consider how the investment would affect each of the two variables that determined the number of NSC shares he would receive from the grants.¹⁰⁰ The increase in invested capital and decrease in net income (from increased depreciation) would *decrease* return on invested capital (“ROIC”) in the current year; but the new rolling stock could decrease maintenance costs and, if the improved rolling stock attracted more freight business in later years, increase revenue. Those two financial effects might overwhelm the effect of the increased depreciation and increased invested capital. If Mr. Moorman forecasted that result, he might anticipate that the purchase of the new locomotives and freight cars would

- *decrease* the average ROIC in the three-year cycle coming to an end in the current year and thereby *decrease* the number of shares Mr. Moorman would have received from the PSU grant based on ROIC performance during that cycle had he decided against making the investment;

¹⁰⁰ Indeed, three variables, as in the years before 2014, NSC split the PSU grants into three different pieces, with one of them determined by operating ratio—an additional complexity omitted here. NSC Form, Proxy Statement (Form DEF 14A) 42–45 (Mar. 19, 2014). The company eliminated that metric from the performance share formula in 2015, on the ground that use of it there was duplicative of its use in computing the annual cash incentive award. NSC 2015 Proxy Statement, *supra* note 12, at 33, 50.

- have *little or no effect* on the average ROIC in the three-year cycle coming to an end next year (because the investment would lower ROIC in one of those three years and raise it in another), thus having little or no net effect on the number of shares Mr. Moorman would receive from the PSU grant based on ROIC performance during that cycle; and
- *increase* ROIC in the three-year cycle that had just begun (because the investment would lower the ROIC in the current year but increase it during the next two years) and thereby *increase* the number of shares Mr. Moorman would receive during that cycle based on ROIC performance.¹⁰¹

If the PSU scheme is to affect Mr. Moorman's decision to buy or not buy the new rolling stock, he would have to perform the same multicycle computation for the other PSU variable—NSC TSR *relative* to that of other North American Class I Railroads and the S&P 500. Again, the investment could have differing effects on *Norfolk Southern's* TSR in the differing cycles. Beyond that, Mr. Moorman would have to include in his calculations a dynamic variable—whether the other North American Class I Railroads might make a similar investment—which could affect *their* TSRs and thereby affect NSC's TSR performance *relative* to that of the other railroads.

After calculating (or at least estimating) both the effect of the locomotive and freight car purchase on his annual bonus and the effect of that investment on the shares he would receive from each of the three ongoing three-year PSU cycles, Mr. Moorman would have still more work to perform. He would have to project the effect of the capital investment on the per-share price of NSC stock. And he would have to consider how developments apart from the capital investment would likely affect the price of NSC stock, which

¹⁰¹ This assumes very large benefits in years two and three, providing a relatively short-term payoff for a long-term investment.

would introduce additional uncertainty.¹⁰² For the price of that stock would determine the value of each share his PSU awards ultimately would yield, as well as the value of the restricted shares that would vest in future years, and the value of his options (both vested and unvested), with differing exercise prices.

As this discussion demonstrates, Mr. Moorman would find it quite difficult to calculate the overall effect on his compensation from buying new locomotives and freight cars. If he had no significant confidence that he could make an accurate calculation, then complex incentives would fail to guide his decision. The whole intricate scheme would be irrelevant. Even if he had *some* confidence in at least a rough calculation of the capital investment decision's impact on the value of his pay package, the power of the incentives to guide his decision would depend on the strength of that confidence. The incentives' power would decrease as Mr. Moorman's uncertainty about his decision's effect on his compensation increased, and as the range of the possible impact broadened.

Turning back from this concrete example to theory, behaviorists would say that Mr. Moorman may have discounted his pay for all of this uncertainty. The theory predicts that such a discount for "uncertainty (i.e., indeterminable expected values)"¹⁰³ would have been in

¹⁰² Events support the view that the company's share return was hard to predict. In 2015, NSC's stock price was hurt by a decline in the demand for coal, and therefore for train service to haul coal, and falling oil prices, which reduced the costs of truck operation to a greater extent than they reduced the costs of rail transportation. See Zacks Equity Research, *Railroad Headwinds: Low Coal Demand, Oil Price Slump*, ZACKS (Aug. 26, 2015), <http://www.zacks.com/commentary/54729/railroad-headwinds-low-coal-demand-oil-price-slump.html> [https://perma.cc/P4ZB-BVRS]. But the stock price was helped by a takeover bid. See Reem Nasr, *Norfolk Southern, Canadian Pacific Shares Jump Amid Deal Report*, CNBC (Nov. 10, 2015), <http://www.cnbc.com/2015/11/09/norfolk-southern-canadian-pacific-shares-jump-amid-deal-report.html> [https://perma.cc/DUM3-QJ5S].

¹⁰³ Pepper & Gore, *Psychology of Incentives Article*, *supra* note 93, at 355; PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 61 ("[T]he

addition to his discount for risk aversion.¹⁰⁴ The discount would have derived from Mr. Moorman's subjective assessment that the nuanced incentives were not worth much to him as a decision-making tool because he could not use them in any reasonably certain predictive way to turn his decisions into personal monetary gain. He may have looked at the incentive package as largely a lottery and, while confident that it would yield some large amount regardless of his decisions, discounted significantly the marginal value that his individual decisions would have upon the package's ultimate value.

Any such discount, of course, imposes a cost on a company and affects the ability of the compensation package to motivate. For example, if a company intends by its pay package to transfer \$X in value to its CEO and the CEO subjectively discounts the compensation by 20% due to its complexity, the company must increase the objective value of the compensation to 1.25 \$X in order to transfer the desired amount. The discount will also mean that compensation at objective value \$X will provide only .8 \$X in motivation.

Research supports the notion that *some* executives discount their complex incentive pay precisely in this way. In-depth interviews by Alexander Pepper of fifteen senior executives in the United Kingdom yielded the comment by one CEO that “[d]eferred share schemes are basically somewhat poorly understood, . . . pretty arbitrary,” and, these days, “extraordinarily complex.”¹⁰⁵ Interviewees identified use of “comparative performance measures, such

subjectively perceived value of long-term incentives is systematically underestimated by senior executives” by reason of, among other things, “uncertainty aversion.”); *id.* at 76 (defining uncertainty as indeterminable expected values).

¹⁰⁴ PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 68.

¹⁰⁵ *Id.* at 18. Pepper describes the exploratory study as consisting of semi-structured interviews with “15 senior executives from companies in the FTSE 350.” *Id.* at 15. The FTSE 350 is an index of “large and mid cap stocks traded on the London Stock Exchange (LSE), which pass screening for size and liquidity.” FTSE RUSSELL, FTSE 350 FACTSHEET (Apr. 28, 2017).

as relative total shareholder return” as a particular problem.¹⁰⁶ As one CEO observed: “I don’t know how to manage relative TSR . . . you don’t wake up in the morning trying to manage something relative.”¹⁰⁷ Putting it another way, relative TSR was out of the executives’ “line of sight” that “link[s] . . . effort, performance, and reward.”¹⁰⁸

A larger study by Pepper, consisting of survey responses in October and November 2011 from 756 top managers in more than fifteen countries,¹⁰⁹ showed that the executives, *considered as a group*, exhibited some degree of aversion to “uncertainty.” Pepper measured uncertainty by three questions and found that many CEOs preferred (i) compensation packages with a fixed point probability for a fixed dollar future bonus over packages offering the same fixed dollar future bonus but subject to a range of probabilities (some below the fixed point and some above); (ii) packages with a guaranteed fixed dollar future bonus over packages with a guaranteed fixed number of shares delivered in a known period, but with no guarantee of share price when the shares would be conveyed; and (iii) packages with a fixed dollar future bonus that would be triggered by a percentage change in company performance in excess of a percentage change in the Retail Price Index over packages with a bonus paid in a number of shares determined by their companies’ TSR relative to the TSR of comparable companies, and with no guarantee of the price of the shares when conveyed.¹¹⁰ An augmented survey that

¹⁰⁶ PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 18.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 21.

¹⁰⁹ *Id.* at 63–64. Pepper defined “top managers” to be “very senior executives who are responsible for defining and executing a firm’s strategy, who through their actions are capable of affecting the company’s profits, share price, reputation and market positioning.” *Id.* at 36. These include the CEO, chief operating officer, and chief financial officer. *Id.* For a further description of the survey, see Pepper & Gore, *Psychology of Incentives Article*, *supra* note 93, at 353.

¹¹⁰ The three questions designed to test for uncertainty aversion are:

1. You are invited to participate in a one-off gamble. Which of the following choices would you prefer?
 - A. 50% chance of winning \$5,250; otherwise nothing.
 - B. A chance P% of winning \$5,250 where P is unknown but is expected to be somewhere between 25% and 75%.
 - C. I am indifferent between A and B.
2. Given that the annual bonus of a senior executive in a large company is around \$45,000 and the median long-term incentive award is around \$67,500 a year, which of the following choices would you prefer?
 - A. A guaranteed bonus of \$45,000 payable in three years' time.
 - B. A guaranteed bonus of 10,000 shares deliverable in three years' time. The current share price is \$4.50. In the past 12 months the share price has fluctuated between \$2.25 and \$6.75.
 - C. I am indifferent between A and B.
3. Given the same facts as question [2] . . . , which of the following would you prefer?
 - A. A cash bonus of up to \$52,500 payable in three years' time provided that your employing company's earnings per share during the period grows at least 3% in excess of the Retail Price Index.
 - B. A bonus of up to 11,650 shares deliverable in three years' time, depending upon the company's relative total shareholder return over the period compared with a basket of comparable companies. The current share price is \$2.95. In the last 12 months the share price has fluctuated between \$2.50 and \$3.75. In previous years bonus payments have ranged between 62% and 72% of target.
 - C. I am indifferent between A and B.

PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 65–66, 75–76, 145–46. Pepper adjusted the amounts of money in the questions depending on survey respondents' statements of how much money they made (\$350,000 or less per year in total compensation; between \$350,000 and \$725,000; and \$725,000 or more). *Id.* at 65–67, 144. The amounts in the questions above were those in the survey provided to the lowest income cohort. *Id.* at 144–46. Note that the theoretically modeled value of choice B in the second question was \$45,000 at the time of the gamble even though,

PricewaterhouseCoopers (“PwC”) conducted in conjunction with Pepper¹¹¹ yielded the same conclusion.¹¹²

While the *group* results are interesting, the most pertinent point here is that, not surprisingly, different executives answered differently. In fact, the distributions of the individual answers to the three questions designed to test uncertainty aversion were very close—particularly when the sample was segmented and only the responses of those who had long-term incentive plans were considered. The following tables¹¹³ show the breakdown from the 2011 study:

of course, the recipient of the gamble could win more or less depending on where the stock price finished at the end of the three years. *Id.* at 66 (using a Black-Scholes model, a risk-free rate of return of 1%, stock volatility of 50%, no dividends, and a nominal strike price as this is essentially service-based restricted stock). Hence, the choice of A over B was a choice of certainty over uncertainty, not a choice of expected value.

¹¹¹ PRICEWATERHOUSECOOPERS INT’L LTD., MAKING EXECUTIVE PAY WORK: THE PSYCHOLOGY OF INCENTIVES 16 (2012) [hereinafter PWC SURVEY] (describing three questions substantially identical to those in *supra* note 110). The PwC study obtained responses from 1106 executives in forty-three countries. *Id.* at 2. Professor Pepper advised the author that the “bigger N, used in the PwC report, contains a convenience sample top-up in order to obtain coverage across all the PwC countries interested in the report” and that “the statistical results, as between the larger and smaller samples, gave, in terms of statistical significance etc., the same results.” Email from Alexander Pepper to author (Mar. 8, 2016) (on file with author).

¹¹² PWC SURVEY, *supra* note 111, at 17.

¹¹³ PEPPER, PSYCHOLOGY OF INCENTIVES BOOK, *supra* note 91, at 69–70 (providing results reproduced in Tables 2 and 3 here).

TABLE 2.

Question ¹¹⁴	All Participants		
	A (Favoring more certainty)	B (Favoring more uncertainty if there is a <i>chance</i> for a higher payoff)	C (Uncertainty Neutral)
Uncertainty Question 1	355 47.0%	268 35.4%	133 17.6%
Uncertainty Question 2	352 46.6%	340 45.0%	64 8.5%
Uncertainty Question 3	382 50.5%	284 37.6%	90 11.9%

TABLE 3.

Question	Participants with Long-Term Incentive Plans		
	A (Favoring more certainty)	B (Favoring more uncertainty if there is a <i>chance</i> for a higher payoff)	C (Uncertainty Neutral)
Uncertainty Question 1	162 44.4%	144 39.5%	59 16.2%
Uncertainty Question 2	169 46.3%	162 44.4%	34 9.3%
Uncertainty Question 3	174 47.7%	158 43.3%	33 9.0%

Thus, in every case—for every question and both for the full set of respondents and the subset who had long-term incentive plans already (and therefore presumably had a better understanding of them)—more than 35% of respondents favored the uncertain alternative that provided either a chance of a higher percentage of a given payout or a chance of a higher payout. Focusing on the respondents with

¹¹⁴ *Id.* at 65–66, 75–76, 145–46; see also *supra* notes 91 & 110 (containing the three questions).

long-term incentive plans common for CEOs at U.S. publicly traded companies, the respondents on the three questions split roughly 46% favoring more certainty, 42% favoring more uncertainty, and 11.5% indifferent. Thus, the message these numbers suggests is not that all companies should decrease the complexity of the compensation schemes they provide to their executives, but that whether complexity increases or decreases an incentive effect, or changes it at all, depends on the *particular* executive whom the company has hired. For example, the Pepper study suggests that a given executive has more than a 46% chance of being averse to uncertainty.¹¹⁵ Thus, a company considering a complex scheme should attempt to determine *whether the individual executive whose pay the company is constructing* falls within this 46%. If so, the company may conclude that a complicated payout scheme will lose a considerable amount of its power to incentivize this executive and will be, in fact, worth less to this CEO than the package costs the company. If so, the company should choose a simpler compensation package.

On the other hand, the Pepper study also suggests a 42% chance that a given executive will embrace complexity and an 11.5% chance that a given executive is indifferent to complexity.¹¹⁶ Thus, a company considering a complex scheme should attempt to determine *whether the individual executive whose pay the company is constructing* may be among one of these two groups. If so, the company should proceed with a pay scheme as complex as other considerations suggest is appropriate.

Because Pepper's work included executives who were not CEOs and his sample drew from executives in many different countries, the numbers from his study cannot be

¹¹⁵ The average of the percentages favoring more certainty among the respondents with long-term incentive plans—column A of Table 3—is 46.13%.

¹¹⁶ The averages of the percentages, among the respondents with long-term incentive plans, of those favoring uncertainty with a chance of a better payoff, and those indifferent to uncertainty—columns B and C of Table 3—are 42.4% and 11.5% respectively.

applied uncritically to CEOs in the United States.¹¹⁷ However, disaggregated, the data show that the uncertainty aversion for executives in the United States was close to the results in the study overall,¹¹⁸ and close to 39% of the sample were CEOs or equivalents.¹¹⁹ Consequently, although the percentage distribution for U.S. CEOs might be somewhat different from those discussed in the last several paragraphs, Pepper's work suggests with considerable force that a substantial number of American CEOs fall into each of his categories: (i) averse to uncertainty in the relation between complicated incentives, their business decisions, and their pay; (ii) content with such uncertainty if the incentives include a chance for high payouts; and (iii) indifferent between pay packages that provide greater certainty but with lower payouts and pay packages that are more uncertain but that offer higher possible payouts. Putting it plainly, individuals differ.

b. Complexity and Insignificant Rewards for Large Numbers of Measures and Tasks

The previous subpart concerns instances where a CEO cannot confidently estimate how his or her decisions will affect future compensation under the CEO compensation plan. This subpart addresses instances in which a CEO *knows* that, whatever value some particular components of the package might ultimately deliver, the value added by those components will be insignificant to the executive's total pay.

The sheer number of variables determining the pay that the modern CEO receives—together with the weights assigned to them—strongly suggests that some variables do

¹¹⁷ See *supra* note 109.

¹¹⁸ Pepper computed an uncertainty aversion index for the subsamples from different countries. PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 72–73. He computed the median index at -.09 and the U.S. index at -.10. *Id.* at 72–73.

¹¹⁹ The table of job titles shows 38.8% of respondents were CEOs or presidents or managing directors, with another 8.0% chairmen. *Id.* at 149.

not provide a meaningful economic incentive at all. For example, 15% of Mr. Moorman's 2014 annual cash incentive payment at NSC depended on a composite service measure that, in turn, depended 30% on a score measuring train connection performance.¹²⁰ This meant that for 2014, the maximum amount that Mr. Moorman could receive for train connection performance (considering that his bonus opportunity was computed against 225% of his \$1 million salary)¹²¹ was \$101,250.¹²² While this seems a handsome amount to an ordinary individual, it comprised less than 1% of Mr. Moorman's total 2014 compensation, which exceeded \$13.5 million.¹²³

As it happened, in 2014 the entire composite service measure (including train connection performance, adherence to operating plan, and train performance) was below the threshold required for *any* award based on that measure.¹²⁴ Yet taking into account the other factors that weighed more heavily in the annual cash computation (operating income counting for 50%, and operating ratio counting for 35%),¹²⁵ Mr. Moorman's cash incentive award was actually *higher* in 2014 than the year before.¹²⁶ In that sense, the poor score on the service measure did not punish him financially at all.

To be clear, this analysis does not suggest that Mr. Moorman was unconcerned with train connections, train performance, or implementation of his railroad's operating plan. His concern, however, most likely grew out of his forty years of railroad experience, which very probably fostered in

¹²⁰ NSC 2015 Proxy Statement, *supra* note 12, at 55.

¹²¹ *Id.* at 54, 62.

¹²² $\$2,250,000 \times .15 \times .3$.

¹²³ Computed by dividing the \$101,250 by the \$13,536,017 total compensation, shown at page 62 of NSC 2015 Proxy Statement, *supra* note 12.

¹²⁴ *Id.* at 56.

¹²⁵ *Id.* at 55.

¹²⁶ *Id.* at 62 (showing the 2013 non-equity incentive plan compensation to be \$1,685,250 and the comparable figure for 2014 as \$1,813,500).

him a commitment to keep NSC's trains running well, on time, and according to plan.¹²⁷ The point is that he very likely was not motivated, *beyond* that experience-based concern, to pay any *more* attention to train connection, train performance, and operating plan by what amounted to small percentage additions or subtractions to his total compensation, which total would be determined predominantly by other factors to which his complicated compensation formula gave greater weight.

The compensation arrangements at Intel raise the same issue. Operational performance determined 50% of the Intel CEO's annual cash incentive award for 2014.¹²⁸ But Intel calculated the score for that factor as "the corporate average" of the company's business unit scores, "subject to a corporate level 'kicker' of 5%."¹²⁹ In turn, the corporate average derived from the scores of ten different business units, each of which had three or four operational goals.¹³⁰ As examples, "PC client billing volume" was one of four operational goals for the PC Client Group and "Comms development: SoFIA schedule" was one of four operational goals for the Platform Engineering Group.¹³¹ Altogether, the ten business units had thirty-two operational goals.¹³² Assuming that each of the scores for the ten business groups was equally weighted and that each operational goal within a business unit was equally weighted within that business unit, then PC client billing volume determined one-quarter of one-tenth of one-half of the CEO's cash bonus—that is, 1.25% of the annual

¹²⁷ William C. Vantuono, *2011 Railroader of the Year: Wick Moorman, Norfolk Southern*, RAILWAY AGE (Dec. 12, 2011), <http://www.railwayage.com/index.php/freight/class-i/2011-railroader-of-the-year-wick-moorman-norfolk-southern.html> [https://perma.cc/FLV3-AST2] (interview with Moorman in which he states that he first went to work for the company in 1975).

¹²⁸ Intel 2015 Proxy Statement, *supra* note 14, at 44.

¹²⁹ *Id.* at 57.

¹³⁰ *Id.* at 58.

¹³¹ *Id.* at 57–58.

¹³² *Id.* at 58.

cash incentive to the CEO. That translated into about \$40,268,¹³³ which in turn was less than one-half of 1% of the CEO's total compensation.¹³⁴

Again, this analysis does not imply that the Intel CEO was unconcerned about PC client billing volume. It strongly suggests, however, that his concern was not prompted by financial reward or punishment through the compensation scheme, which was so fragmented that this lightly weighted individual component could not significantly affect his pay.

Of course, it is possible that even small rewards for a long list of goals might motivate as to each of the small goals—for psychological reasons rather than monetary reasons. But that depends on individual psychology. Thus, some top officers might fret seriously over a low score on any measure—no matter how many there are, no matter how small the weight the compensation formula attributes to each, and no matter how small the payment each generates. For such a CEO, each small part of the pay package motivates. Other CEOs might ignore a lengthy list and concentrate on one or more measures that both (i) seem better able to grade company performance overall, like stock price performance and dividends; and (ii) are more important to the CEO financially, as will be the stock price if the executive has shares of company stock worth millions of dollars.¹³⁵ Whether small payments for multiple, subdivided performance measures do any good depends on the individual CEO.

¹³³ Intel paid cash incentives to the CEO totaling \$3,354,400, \$3,221,400 of which was annual incentive cash (the rest being quarterly incentive cash). *Id.* at 53, 54. One and one-quarter percent of that annual incentive is \$40,267.50.

¹³⁴ Intel reported providing total compensation to its CEO valued at \$11,197,400. *Id.* at 53. Dividing \$40,267 by that number yields 0.0036. While the percentage would be larger if the operational goal had been one of only three goals for a business group, it would still have been under one-half of 1% of total pay (1/3 of 1/10 of 1/2 is 0.0167, which multiplied by the \$3,221,400 annual cash incentive payment yields \$53,797.38, which divided by \$11,197,400, yields 0.0048).

¹³⁵ See Table 3, *infra* notes 183–201.

The potential harm from manifold measures similarly depends on individual personality. Thus, some CEOs might obsess over a perfect or near-perfect score across all the measures in their pay schemes and might therefore devote too much attention to each of so many different specific goals that this effort detracts from their concentration on important strategic matters. Some CEOs might resent the implication that the board of directors believes that the CEO will somehow forget parts of the business unless he or she receives a small payment for devoting some time to each such part. Computations that include myriad variables having inconsequential impact on total pay could degrade the performance of these top executives.

The message is not that including a large number of variables with low rewards is good or bad, but that whether doing so serves a company well or ill depends on the personality of the CEO receiving the pay. Without knowing that personality, the company that eschews this practice can miss an opportunity to motivate its top officer to keep his or her eye on a host of matters that are “drivers” of the company’s success.¹³⁶ But, without knowing that personality,

¹³⁶ See LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 229, stating:

[O]ne way to select the measures used to award compensation is to use those that were identified during the business modeling process as being correlated with success in the corporate strategy. In general, these include a mix of accounting measures (such as economic value added, earnings-per-share growth, and return on assets), stock market measures (such as total shareholder return), and nonfinancial measures (such as customer satisfaction, product defect rates, and market share).

But Larcker and Tayan follow this explanation with an exposition of the four financial and six nonfinancial metrics used in determining 2013 annual performance bonuses for Northrop Grumman NEOs, adding the questions: “Are the large number of financial and nonfinancial measures in this annual bonus plan really necessary? When does a plan become too complicated?” *Id.* at 231; see also MICHAEL B. DORFF, INDISPENSABLE AND OTHER MYTHS: WHY THE CEO PAY EXPERIMENT FAILED AND HOW TO FIX IT

the company that includes a laundry list risks motivating resentment rather than performance, distracting CEO attention from critical company decisions, or simply producing a scheme that it can flourish to shareholders but which has no real impact because the CEO ignores it.

2. Individual Valuation of Contingent Equity Awards

Companies pay top executives in cash and equity. Equity dominates. When companies pay this form of compensation and ignore individual personality and financial circumstances, large and distinct problems follow.

Equity comprised more than 50% of CEO pay at the Exemplar Companies in 2014. According to NSC's summary compensation table, slightly more than 55% of Mr. Moorman's 2014 compensation consisted of equity awards—with those awards valued at cost to NSC as computed per accounting rules.¹³⁷ So computed (with an adjustment in the JPM figure for a change in the year of one award), equity awards at the other four Exemplar Companies bulked similarly large in the total 2014 compensation paid to their CEOs: Intel (59%),¹³⁸ Chevron (52%),¹³⁹ J&J (55%),¹⁴⁰ and JPM (55%).¹⁴¹

250–51 (2014) (arguing that no score on any single measure should reward an executive with “enormous pay”); *id.* at 253–55 (using AutoZone, Inc. as an example, arguing that its then-current pay system should be replaced with “a carefully calibrated system of bonuses linked to a large number of metrics”); *id.* at 253 (suggesting a bonus calculation with weighted scores in seven different categories of factors “that AutoZone’s public filings singled out as being important to the company’s success”); *id.* at 253–55 (many of which are subdivided into more than one variable, producing a total of twenty-three different metrics, eight of which would each count for only 1% or 2% of the total bonus payout).

¹³⁷ NSC 2015 Proxy Statement, *supra* note 12, at 62 (adding the \$4,879,422 in stock awards to the \$2,624,976 option award, then dividing by the total compensation figure of \$13,536,017). For the accounting rules, see *infra* notes 150–156.

¹³⁸ Intel 2015 Proxy Statement, *supra* note 14, at 53 (dividing the \$6,658,700 in stock awards by the \$11,197,400 in total compensation).

These figures reflect the norm. For example, one commercial study of 2014 CEO pay at companies in the S&P 1500 reported that top executives received on average 53% of their total compensation in equity.¹⁴²

The equity included in CEO compensation has only contingent value. That is, the ultimate value that the CEO realizes from the equity award is contingent on future events. Thus NSC granted Mr. Moorman an option award in 2014 permitting him—after the options vested four years later and continuing thereafter for six years—to buy up to 87,880 shares of NSC common stock at a price of \$94.170 per share,¹⁴³ the market price of NSC shares on the grant date.¹⁴⁴ The value of these options was contingent upon whether the price of the company's stock exceeds the \$94.170 per share exercise price during the period in which he would be able to exercise the options (2018–2024). Similarly, in 2014 NSC granted Mr. Moorman an award of 11,950 shares of service-based restricted stock, vesting in five years.¹⁴⁵ The value of those restricted shares was contingent on the price

¹³⁹ Chevron 2015 Proxy Statement, *supra* note 18, at 44 (adding the \$4,816,500 in stock awards to the \$8,586,240 option award, then dividing by the \$25,970,417 in total compensation).

¹⁴⁰ J&J 2015 Proxy Statement, *supra* note 16, at 54 (adding the \$9,467,380 in stock awards to the \$4,168,139 option award, then dividing by \$24,989,306 in total compensation).

¹⁴¹ JPM 2015 Proxy Statement, *supra* note 20, at 44, 49 (dividing the \$11,100,000 stock award by the total \$20,000,000 compensation). The computation uses this figure instead of computing the percentage from the summary compensation table because the equity figures in the summary compensation table included some 2013 compensation due to the timing of awards. *Id.* at 58 n.5 to tbl.

¹⁴² EQUILAR, 2015 CEO PAY STRATEGIES 9 fig.3 (providing figures for 2014). “The S&P Composite 1500® combines three leading indices, the S&P 500®, the S&P MidCap 400®, and the S&P SmallCap 600® to cover approximately 90% of the U.S. market capitalization.” S&P DOW JONES INDICES, <http://us.spindices.com/indices/equity/sp-composite-1500> [https://perma.cc/EZC8-EF98] (last visited May 22, 2017).

¹⁴³ NSC 2015 Proxy Statement, *supra* note 12, at 68.

¹⁴⁴ *Id.* at 56.

¹⁴⁵ *Id.* at 65.

of the company's stock after the restrictions expired in 2019. In the same way, NSC granted Mr. Moorman PSUs in 2014 that would transfer to him three years later some number of NSC shares determined by a complicated formula including average after-tax return on average invested capital over the three years, and NSC's TSR relative to either the TSR for other railroads or the TSR for the S&P 500.¹⁴⁶ The ultimate value of that award was contingent both on the performance measures that would determine how many shares he would receive at the end of the three-year performance cycle and on the market price of NSC stock at that time.¹⁴⁷

A very considerable body of theoretical and empirical work has demonstrated that the *subjective* value of such contingent equity awards *to a CEO* is lower than the *objective* cost of such awards *to the company* granting them.¹⁴⁸ Moreover, the theory and empirical studies demonstrate that different CEOs discount the value of such awards—off the company cost—by different amounts, depending on their individual characteristics and circumstances.¹⁴⁹ Thus, different executives will place different subjective values on the same equity grant.

Accounting rules measure the cost to a company of the contingent equity it grants by the fair value that the company gives up when it makes the grant.¹⁵⁰ The cost of a service-based restricted stock award is the market value of the company's stock on the date of the grant, multiplied by the number of shares in the award,¹⁵¹ with the cost reduced

¹⁴⁶ *Id.* at 57.

¹⁴⁷ *Id.*

¹⁴⁸ See the remainder of this Part III.B.2, particularly notes 159–180 *infra* and accompanying text.

¹⁴⁹ *Id.*

¹⁵⁰ PRICEWATERHOUSECOOPERS LLP, STOCK-BASED COMPENSATION: A MULTIDISCIPLINARY APPROACH 1-13 (2d ed. July 2015) [hereinafter PWC, STOCK-BASED COMPENSATION] (“The fair value of an award is the cost to the company of granting the award and should reflect the estimated value that the company would be obligated to provide when an employee is entitled to the award . . .”).

¹⁵¹ *Id.* at 8-9.

to reflect an estimated (then trued up) forfeiture rate by failure to continue to work at the company through the vesting period.¹⁵² The cost of a time-vested stock option is the value of the option grant on the date of the grant, as determined by a mathematical model—either the Black-Scholes model or the binomial model (also known as the lattice model).¹⁵³ Both these models are based on (i) the price of the stock on the grant date, (ii) the exercise price for the option, and (iii) the following assumptions or estimates: (a) the expected term of the option (how long until actually exercised), (b) the volatility of the price of the underlying stock, (c) the risk-free interest rate, and (d) the expected dividend rate.¹⁵⁴ Companies recognize the cost of an option

¹⁵² *Id.* at 1-42 (“[C]ompanies are required to develop an assumption regarding the prevesting forfeiture rate beginning on the grant date, which will impact the estimated amount of compensation expense to be recorded over the requisite service period. Companies are required to true-up forfeiture estimates for all awards with performance and service conditions through the vesting date so that compensation cost is recognized only for awards that vest.”) (citation omitted). The company recognizes the cost of a restricted stock grant over the vesting period. *Id.* at 8-9.

¹⁵³ *Id.* at 1-16, ch. 6.

¹⁵⁴ *Id.* at 7-2. The company recognizes the option expense, computed by the model, over the vesting period. *Id.* at 8-9. If an executive leaves a company after an option grant but before the option vests, the executive typically forfeits the option. KOLB, NOT ENOUGH, *supra* note 25, at 57. If the executive leaves the firm after the option vests but before it has expired, the executive typically must either exercise the option at or near the time of departure or forfeit the option. *Id.* If the executive remains with the company through the entire exercise period, the executive can exercise at any point during that period. PWC, STOCK-BASED COMPENSATION, *supra* note 150, at 7-4 (“Because employees typically cannot exercise an option until it vests, the vesting date represents the low end of the range of possible exercise dates, whereas the contractual term represents the high end of the possible range. An analysis of historical exercise and post-vesting cancellation behavior is generally used to estimate where within this range the exercise or post-vesting cancellation may occur. A company should use its relevant historical information, as listed above, for similar options and employee groups.”). The volatility of

grant over the vesting period, and that time-based recognition permits them to adjust cost if an executive leaves the company before the vesting period runs and thereby forfeits the option.¹⁵⁵ The cost of a performance share award is the market value of the company's stock on the date the company grants the award multiplied by the maximum number of possible shares that could be awarded, discounted for the probabilities that (i) different levels of performance will be achieved and (ii) the recipient will fail to continue to work at the company through the performance cycle.¹⁵⁶

Although the calculation of contingent equity cost to a company is complex, it is objective and based on observable facts. As long as these facts are the same from one company to another, the cost of the grant is the same. Moreover, the cost is real and concrete in the sense that each company must include the calculated cost of each contingent equity grant as part of reported compensation expense, which decreases its reported earnings.¹⁵⁷

Financial theory, however, identifies subtle complications in how the individual executive subjectively values contingent equity, depending on characteristics and circumstances peculiar to that individual. An understanding of the theory best begins with common sense. Intuitively,

the stock is the standard deviation of the stock price, often estimated by historical volatility for the company or its peers. *Id.* at 7-23 to -26.

¹⁵⁵ PWC, STOCK-BASED COMPENSATION, *supra* note 150, at 7-3 to -4 (“[P]re-vesting forfeitures . . . are taken into account by the company recognizing compensation cost only for those awards for which employees render the requisite service.”).

¹⁵⁶ *Id.* at 1-22 to -24. The company recognizes the expense when it is probable that the required performance will be achieved—net of an estimate of pre-vesting forfeiture—reassessing that probability each reporting period, then trues-up at the end of the vesting period so that the total expense recognized reflects the actual number of shares awarded. *Id.* at 1-24, 1-26, 8-9.

¹⁵⁷ KOLB, NOT ENOUGH, *supra* note 25, at 66–69 (tracing the history, ending with FAS 123R, which now requires expensing option compensation); PWC, STOCK-BASED COMPENSATION, *supra* note 150, at 1-2 n.1 (after the codification of U.S. generally accepted accounting principles, requirement for expensing located in ASC 718).

concentration of wealth in one or only a few assets is risky as it involves putting financial eggs into one, or just a few, baskets. More formally, a CEO may have undiversified wealth. A CEO usually owns equity in his or her company outright (that is, without contingencies), and thereby risks a decrease in that portion of investment wealth should a decline in the company's economic fortunes result in a stock price decline. As the percentage of the executive's investment wealth comprised of such equity increases, the executive's economic well-being becomes more concentrated in the fate of the company, and his or her investment risk grows.¹⁵⁸ In addition, different individuals display differing degrees of personal risk aversion; that is, aversion to risking either (i) decreases in personal wealth or (ii) increases in their wealth that are lower than expected or planned.

All of this suggests that when a CEO with relatively high risk aversion already has a large percentage of investment wealth tied up in company equity, that CEO will substantially discount the value of *additional* contingent equity provided as compensation. It also suggests that different CEOs will subjectively discount *the same contingent equity pay package* differently, depending on their individual risk aversion and the proportion of investment wealth comprised of company equity before they receive the additional contingent equity award. If an award also provides that the executive will forfeit options or restricted stock if he or she leaves the company before vesting, different executives will have different discount rates on the same grant if they subjectively estimate different probabilities that they will depart before that time.

¹⁵⁸ Since he or she usually works exclusively for one company, the CEO has committed all of his or her human capital to that company and risks a decline in the return on that capital should the company's economic fortunes decline to the point that it has to cut compensation. This circumstance aggravates the problems created by concentration of investment wealth in company equity, since the same events that could reduce the company's ability to pay would likely also reduce the price of its stock.

Economists have for years worked with models that formalize these ideas.¹⁵⁹ The results are quite startling. An early analysis discussed a hypothetical executive with wealth (exclusive of the option grant discussed next) worth \$10,000,000, who was granted a ten-year option on 10,000 shares of stock, with both the price of the stock at grant and at exercise equal to \$50, with a 20% stock price variance, and an expected compounded stock return of 12% annually.¹⁶⁰ The Black-Scholes calculation (reflecting the cost to the company) valued the award at **\$351,260**.¹⁶¹ Application of a model utility function showed that an executive with low proportional risk aversion and only 10% of his or her \$10,000,000 wealth in company equity would subjectively value the option award at \$321,500.¹⁶² However, the model showed that the value of the option award decreased if the hypothetical executive was more risk averse and held a higher percentage of investment wealth in company equity.¹⁶³ At the highest relative risk aversion and with 90% of the \$10,000,000 wealth tied up in company equity already, the executive would subjectively value the new option grant at only **\$19,700**.¹⁶⁴

A later study, employing a slightly different model, hypothesized an executive who received a ten-year option on one share of stock.¹⁶⁵ Assuming a \$30/share stock price on the grant date, a \$30/share exercise price, and 30% stock price volatility, the Black-Scholes method computed the cost of the option award to the company at **\$16.55**.¹⁶⁶ However, an executive with relatively low risk aversion and 50% of \$5

¹⁵⁹ *E.g.*, KOLB, NOT ENOUGH, *supra* note 25, at 87–88.

¹⁶⁰ Richard A. Lambert et al., *Portfolio Considerations in Valuing Executive Compensation*, 29 J. ACCT. RES. 129, 134 (1991).

¹⁶¹ *Id.* at 135 tbl.1 n.a.

¹⁶² *Id.* at 135 tbl.1.

¹⁶³ *Id.*

¹⁶⁴ *Id.*

¹⁶⁵ Brian J. Hall & Kevin J. Murphy, *Stock Options for Undiversified Executives*, 33 J. ACCT. & ECON. 3, 10 (2002).

¹⁶⁶ *Id.* at 12 tbl.1.

million wealth invested in company equity (holding the rest in cash) would, if rationally employing the posited utility function, value the option at only 63.5% of the Black-Scholes value (i.e., **\$10.51**); and an executive with relatively high risk aversion and 67% of investment wealth already in company equity (again holding the rest of non-firm wealth in cash) would value the option at only 21.1% of the Black-Scholes value (i.e., **\$3.49**).¹⁶⁷

A third theoretical work provided discounts for both options and service-based restricted stock. The study assumed that a company granted an executive a five-year option on stock with a market price at \$30/share, 30% market price volatility, and an expected return of 10%.¹⁶⁸ If the exercise price equaled \$30/share, the stock's beta equaled 1, the recipient executive had low relative risk aversion, and only 30% of his or her wealth in options, the executive would subjectively discount the Black-Scholes value of the option by **34.5%**.¹⁶⁹ However, the executive would discount the Black-Scholes value by **86.1%** if all the conditions remained the same, except that the executive's relative risk aversion doubled and the executive held 70% of his or her wealth in options.¹⁷⁰

This last work found a similar pattern, albeit with smaller variations, when the exercise price of the option dropped to zero—meaning that the option mimicked service-based restricted stock, which the executive receives without paying anything to the company but simply by remaining employed through the vesting period.¹⁷¹ With all the

¹⁶⁷ *Id.* The authors defined the subjective value to the executive as the “certainty equivalence” of the option, which they described as “the amount of riskless cash compensation the executive would exchange for the option.” *Id.* at 9.

¹⁶⁸ Yisong S. Tian, *Too Much of a Good Incentive? The Case of Executive Stock Options*, 28 J. BANKING & FINANCE 1225, 1234 tbl.3 (2014).

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION 171 (2004) (explaining that restricted stock is an option with an exercise price of \$0).

conditions in the last paragraph except an exercise price at zero, the low-risk-aversion executive with only 30% of wealth in company options would discount the value of the \$30 in restricted stock by **7.2%** off the Black-Scholes value, while the high-risk-aversion executive with 70% of wealth in company options would discount the restricted stock by **28.4%**.¹⁷²

Other academic analyses, using utility function models, confirm these results.¹⁷³ Thus well-established financial theory suggests not only that executives discount future contingent equity by very significant amounts, but the amount of the discount will vary tremendously from one individual executive to another, depending on the personal characteristics of the particular executive—particularly his or her aversion to risk in personal financial affairs and the proportion of his or her wealth already committed to company equity.

These theoretical studies are important because empirical work confirms that different executives, in fact, have differing degrees of risk aversion and differing percentages of their wealth invested in equity issued by their firms. Using data from a sample of 65,000 option exercises by approximately 7000 executives during the period from 1996 to 2008, one study found implied risk aversion that varied from 0.110 at the 10th percentile, to 0.911 at the median, to 6.170 at the 90th percentile.¹⁷⁴ The United States does not

¹⁷² Tian, *supra* note 168, at 1234 tbl.3.

¹⁷³ KOLB, NOT ENOUGH, *supra* note 25, at 87–88 (referencing some of the studies in the text, and others).

¹⁷⁴ Steffen Brenner, *The Risk Preferences of U.S. Executives*, 61 MGMT. SCI. 1344, 1345, 1349 (2015) (describing sample); *id.* at 1346–48 (describing the methodology by which the researcher derived implied risk aversion from option exercises); *id.* at 1350 tbl.4 (showing percentile distribution of derived risk aversions). The executives in the sample included CEOs as well as other high-ranking officers such as CFOs and executive vice presidents. *Id.* at 1350 tbl.3. Although the article did not separately provide a percentile distribution for the risk aversions derived from the 16,400 option exercises by CEOs in the sample, *id.* at 1350 tbl.3, it did identify the mean derived CEO risk aversion as 1.92, the median as

require that CEOs or other executives at publicly traded companies disclose their total personal wealth or the percentage of that wealth consisting of equity interests in their companies. But using a technique that estimates the amount of non-firm wealth, the same study that estimated executive risk aversion also derived the non-firm wealth for the 7000 executives.¹⁷⁵ It found a wide range in the proportion of wealth that the executives held in the form of their firms' stock.¹⁷⁶

Empirical studies that directly attempt to derive the subjective value of options and restricted stock also conclude that executives generally value options and restricted stock below the price of those compensation vehicles to their companies *and* that the degree of the discount depends critically on the characteristics of the individual.¹⁷⁷ As one

0.59 and the standard deviation as 5.50, *id.* at 1351 tbl.5. The difference between the median and the mean, and the large standard deviation, substantiates a wide range of CEO risk aversion.

¹⁷⁵ *Id.* at 1349 (explaining the technique used).

¹⁷⁶ *Id.* at 1349 tbl.2 (reporting the mean ratio of non-firm to total wealth in the sample equal to 0.555, with a standard deviation of 0.239).

¹⁷⁷ In 2004, the Watson Wyatt consulting firm published the results of an online survey of high-income employees that, among other things, asked the employees to identify trade-offs between stock options at their companies and cash. WATSON WYATT WORLDWIDE, HOW DO EMPLOYEES VALUE STOCK OPTIONS? 5–6 (describing sample of 1000 respondents from more than 300 companies and describing methodology). Watson Wyatt then compared the difference between the cash equivalent, as identified by the survey respondents, and the value of the options, as computed using the Black-Scholes method. The employees generally valued options at a cash equivalent below the value of the options as computed by Black-Scholes. Significantly for the discussion here, Watson Wyatt estimated that employees who were “conservative” investors on average discounted the options by 41% off the Black-Scholes value and that employees who were “aggressive” investors discounted the options by only 36%. *Id.* at 11 tbl.4. Moreover, the average estimated discounts increased when Watson Wyatt increased the number of shares in the hypothetical grant from 100 options to 500 options, with the estimated average discount applied by “conservative” investors increasing to 53% off the Black-Scholes value and the estimated average discount applied by “aggressive” investors increasing to 41%. *Id.* at 11 tbl.3.

researcher puts it, the empirical evidence “suggests that it is necessary to measure executives’ equity incentives from their personal perspective.”¹⁷⁸

Aggravating this problem, recent research by behavioral economists suggests that a significant proportion of executives discount *future* payouts (which include payouts with which this Article is concerned, from equity that can be converted into cash only after time vesting, or performance vesting over a multiyear performance cycle) at a far higher rate than financial theory would employ—with these discount rates, simply for delayed realization, up to or exceeding 30%.¹⁷⁹ However, once again, individuals differ. In

Using a similar method to determine the subjective value of restricted stock to survey participants, Watson Wyatt found that conservative investors discounted restricted stock by 22% off the grant date stock price, while the aggressive investors discounted restricted stock by 10%. *Id.* at 12 tbl.5. Although Watson Wyatt did not provide the numbers, they reported that “[f]or larger grants, employees place a greater discount on the value of those [restricted] shares . . .” *Id.* at 7.

An unpublished study attempted to derive CEOs’ subjective value of their equity holdings in their companies by studying stock sales and option exercises during 1996–2005, with the sample covering 1651 individual CEOs over 9507 executive years. Christopher S. Armstrong, *The Incentives of Equity-Based Compensation and Wealth* 20–22 (Feb. 14, 2007), <https://www.kellogg.northwestern.edu/accounting/papers/Chris%20Armstrong%20.pdf> [<https://perma.cc/7329-DL7L>]. The study concluded that “most executives subjectively value their equity holdings below the risk-neutral expected value which is consistent with risk aversion and lack of diversification affecting their valuations.” *Id.* at 44.

¹⁷⁸ Armstrong, *supra* note 177, at 44.

¹⁷⁹ Behavioral economists characterize these as “hyperbolic” rates. See Pepper & Gore, *Psychology of Incentives Article*, *supra* note 93, at 352 (“Time effects are determined by a hyperbolic discount function . . . , rather than the more conventional exponential discounting function used in finance and discounted utility theory. Hyperbolic discounting has been extensively tested in experiments and in field research and is the dominant theory of inter-temporal choice favored by behavioral economists . . .”) (citations omitted). The Pepper study, described in *supra* note 109 and accompanying text, asked three questions to determine the time discounts that survey participants employed. PEPPER, PSYCHOLOGY OF INCENTIVES BOOK, *supra* note 91, at 66, 70 tbl.4.1 (showing results of answers to three “Time” questions), 145. Pepper computed the median

fact, a large minority of respondents (more than one-third) selected answers to survey questions that did *not* imply an outsize discount rate.¹⁸⁰ Behavioral theory would posit that the differences are driven by individual psychology.

Taken altogether, the theory and empirical evidence show that the value one CEO subjectively places on a package of contingent equity incentives may differ from the value that a second CEO places on the *same* package. Further, the two values may be far apart if the two CEOs have significantly different degrees of risk aversion, and hold significantly different percentages of their total wealth in firm stock and stock derivatives. The variance increases further if one CEO discounts future economic benefit at the rate that rational economics suggests and the other discounts future benefits at a psychologically driven higher rate. This, in turn, means that—without knowing and considering the risk aversion of the particular individual who is the CEO at that company, or

time discount rates for all participants at 33% and for participants who had long-term incentive plans at 32%. *Id.* at 70 tbl.4.1. The median discount rate for U.S. participants in the survey equaled 30.8%. Pepper & Gore, *Psychology of Incentives Article*, *supra* note 93, at 357 tbl.3. As Pepper and Gore put it:

According to standard financial theory, individuals should discount future receipts at rates which are consistent with the return on comparably risky future cash flows, adjusted for inflation. In the present case, time discount rates should, therefore, have been close to the risk-free rate of around 1% per annum, subject to local inflation, which in 2011 varied between under 1% (Switzerland) to over 9% (Argentina)

Id. at 355–56 (citation omitted). The PwC survey yielded similar results to virtually the same questions. PWC SURVEY, *supra* note 111, at 18–19 (reciting questions and estimating a 31% discount rate for both participants overall and for the subset of North American participants).

¹⁸⁰ PEPPER, *PSYCHOLOGY OF INCENTIVES BOOK*, *supra* note 91, at 70 tbl.4.1 (reporting the percentages who selected alternative B and who therefore did not employ hyperbolic discount rates when answering the three time questions as 35.1%/44.6%/36.0% for all respondents and 38.4%/46.3%/36.2% for the subset of respondents with long-term incentive plans).

the distribution of that individual's investments between company equity and other assets, and without knowing whether the individual subjectively applies a psychologically driven hyperbolic discount to future returns—a company cannot have even a reasonably approximate idea of how its CEO values his or her contingent equity incentive package. Accordingly, the company does not know if the subjective value of the package to the CEO is sufficient to motivate the CEO to take the actions that will cause the package to pay maximum rewards, or not. The company is flying blind.

3. Individual Amount of Accumulated Equity

The previous subpart discussed the effect of the percentage of a CEO's wealth invested in company shares before the new grant on the value of an additional equity grant. But the absolute value of the accumulated equity a CEO holds—and the ratio of that absolute amount to a new contingent equity grant—has another profound implication.

Finance academics pointed out years ago that top officers of public companies often hold so many shares of their companies' stock that small changes in the per-share price of that stock can have a far greater impact on CEO wealth than all of the incentives provided by yearly compensation.¹⁸¹ That remains true today.¹⁸² To illustrate this phenomenon and to

¹⁸¹ See John E. Core et al., *Executive Equity Compensation and Incentives: A Survey*, 9 FRBNY POL'Y REV., Apr. 2003, at 27, 30 (citing studies to showing that the vast majority of a typical CEO's incentives to increase stock price are driven by variation in the value of his stock and option portfolio, that is, not by flow compensation).

¹⁸² Larcker and Tayan provide a table of information about CEO equity wealth at the 4000 largest U.S. companies, showing:

[T]he average value of CEO equity wealth is significantly larger than the average value of annual compensation. This means that for a typical executive, the incentives provided by the equity holdings are at least as important and often dominate the incentives provided by annual compensation. As a result, a typical executive considers how decisions potentially affect *total wealth* and not just one year's pay.

show that it varies widely across executives, Table 4 shows equity holdings by the CEOs at the five Exemplar Companies at the time their companies granted them additional equity awards at the beginning of 2014. The table also compares the total equity holdings of each CEO both to the 2014 equity grants and to total 2014 compensation. To help explain the differences between CEOs, the table also provides the approximate date that each took office.

One way to measure the incentive value of wealth is by calculating its sensitivity to changes in stock price. For example, the median CEO in [the table] stands to gain roughly \$193,000 in wealth if the stock price increases 1 percent, \$9.9 million if the stock price increases 50 percent, and \$20.3 million if the stock price doubles. These dollar amounts give considerable incentive to perform.

LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 247–48.

TABLE 4.

Company (CEO)	Total Equity Value Owned by CEO When Grants Made, 2014 ¹⁸³	Reported Value (Cost to Company) of Equity Awards to CEO, 2014 (multiples of total equity over yearly equity awards) ¹⁸⁴	Reported Value (Cost to Company) of Total Compensation to CEO, 2014 (multiples of total equity over total yearly compensation) ¹⁸⁵	Date When CEO Took Office ¹⁸⁶
NSC (Moorman)	\$50,115,175	\$7,504,398 ¹⁸⁷ (6.68)	\$13,536,017 ¹⁸⁸ (3.70)	Nov. 2005 ¹⁸⁹
Intel (Krzanich)	\$8,236,781	\$6,658,700 ¹⁹⁰ (1.24)	\$11,197,400 ¹⁹¹ (.74)	May 2013 ¹⁹²
Chevron (Watson)	\$52,130,428	\$13,402,740 ¹⁹³ (3.89)	\$25,970,417 ¹⁹⁴ (2.01)	2010 ¹⁹⁵

¹⁸³ Shares held outright and vested, in-the-money options. The Los Angeles Office of Analysis Group calculated all figures in this column based on company SEC filings. All calculations are on file with author.

¹⁸⁴ Computed by dividing the number in the column “Total Equity Value Owned by CEO When Grants Made” by the number in this column.

¹⁸⁵ Computed by dividing the number in the column “Total Equity Value Owned by CEO When Grants Made” by the number in this column.

¹⁸⁶ This column reports the time at which the individual became the CEO and does not add any subsequent date on which the individual became board chair.

¹⁸⁷ NSC 2015 Proxy Statement, *supra* note 12, at 62 (sum of Stock Awards and Options Awards columns in Summary Compensation Table).

¹⁸⁸ *Id.*

¹⁸⁹ *Id.* at 13.

¹⁹⁰ Intel 2015 Proxy Statement, *supra* note 14, at 53.

¹⁹¹ *Id.*

¹⁹² *Id.* at 11.

¹⁹³ Chevron 2015 Proxy Statement, *supra* note 18, at 44 (sum of Stock Awards and Option Awards columns in Summary Compensation Table).

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at 10.

Company (CEO)	Total Equity Value Owned by CEO When Grants Made, 2014 ¹⁸³	Reported Value (Cost to Company) of Equity Awards to CEO, 2014 (multiples of total equity over yearly equity awards) ¹⁸⁴	Reported Value (Cost to Company) of Total Compensation to CEO, 2014 (multiples of total equity over total yearly compensation) ¹⁸⁵	Date When CEO Took Office ¹⁸⁶
J&J (Gorsky)	\$13,909,497	\$13,635,519 ¹⁹⁶ (1.02)	\$24,989,306 ¹⁹⁷ (0.56)	Apr. 2012 ¹⁹⁸
JPM (Dimon)	\$366,276,046	\$11,100,000 ¹⁹⁹ (33.00)	\$20,000,000 ²⁰⁰ (18.31)	Dec. 31, 2005 ²⁰¹

Note that the value of the options, restricted stock, and performance shares being granted in 2014 to each of the executives was contingent equity and had—for the CEOs—almost assuredly less value than the companies reported as cost, for all the reasons set out in Section III.B.2. The CEOs most likely also discounted the shares that they held outright and their vested in-the-money options to some extent due to impediments to selling company stock. Most public companies impose stock ownership requirements on their CEO, mandating that the CEO continuously hold common stock in some amount described (i) as shares with an aggregate value equaling some multiple of the CEO's salary, or (ii) as a fixed number of shares, or (iii) as an

¹⁹⁶ J&J 2015 Proxy Statement, *supra* note 16, at 54 (sum of Stock Awards and Option Awards columns in Summary Compensation Table).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 18.

¹⁹⁹ JPM 2015 Proxy Statement, *supra* note 20, at 44, 49. Table 4 uses this figure instead of the figure in the Summary Compensation Table because the equity figures in the Summary Compensation Table included some 2013 compensation due to the timing of awards. *Id.* at 58 n.5 to Sum. Comp. Tbl.

²⁰⁰ *Id.* at 49 (using number from this page rather than the total number in the Summary Compensation Table for the reason stated in the previous note).

²⁰¹ *Id.* at 13.

amount determined by some other formula.²⁰² Companies take this step in order to ensure that executives do not sell all their company stock and thereby sever the alignment of their interests with the interests of other shareholders.²⁰³ NSC, for example, required Mr. Moorman to own shares with a value equal to at least five times his annual cash salary.²⁰⁴ Intel required its CEO to own a minimum of 250,000 shares.²⁰⁵ Chevron required its CEO to own shares worth five times his cash salary,²⁰⁶ and J&J mandated that its top officer own stock worth six times salary.²⁰⁷ JPM imposed the most onerous holding rule, requiring that the CEO own a minimum of 1,000,000 shares and that, as additional restricted shares vest, he keep 75% of them.²⁰⁸ Moreover, insider trading law prohibited each of the chief executives from selling shares whenever they possessed material nonpublic information.²⁰⁹

²⁰² See, e.g., EQUILAR, EXECUTIVE STOCK OWNERSHIP GUIDELINES REPORT 6 (2013) (“The prevalence of Fortune 100 companies with publicly-disclosed stock ownership policies for executives increased from 86.3% in 2011 to 89.4% in 2012.”); *id.* at 8 (noting “[t]he most common guideline structure, used by 82.3% of companies with ownership guidelines in 2012, defines target ownership levels as a multiple of base salary” and describing other formulae, with the second most prevalent being a fixed number of shares).

²⁰³ *Id.* at 4 (“When shareholders invest in a company, they want to make sure that the interests of the leadership team are aligned with their own. One aspect of this is making sure that the leadership team has a financial stake in the company. . . . However, if an executive sells most of his or her shares upon the vesting of the awards, that individual’s tangible alignment with shareholder interests may decrease. One way to make sure that executives have a stake in company performance is by introducing some form of share ownership policy”)

²⁰⁴ NSC 2015 Proxy Statement, *supra* note 12, at 48.

²⁰⁵ Intel 2015 Proxy Statement, *supra* note 14, at 50.

²⁰⁶ Chevron 2015 Proxy Statement, *supra* note 18, at 42.

²⁰⁷ J&J 2015 Proxy Statement, *supra* note 16, at 34, 50.

²⁰⁸ JPM 2015 Proxy Statement, *supra* note 20, at 53.

²⁰⁹ *Chiarella v. United States*, 445 U.S. 222, 226–29 (1980) (recognizing that section 10(b) of the Securities Exchange Act imposes on corporate insiders with material nonpublic information a duty to disclose

Even taking all of this into account—that the CEOs would discount the contingent equity off the amount reported by the company and also discount the market value of their shares held outright and their vested in-the-money options—the figures in Table 4 provide an important insight. *Some* of these CEOs—but not all—owned so much equity (through stock owned outright and vested, in-the-money options) that the effect of their decisions on the price of that *already-owned* equity almost certainly would have a greater impact on their individual wealth than the effect of those decisions on the *contingent* equity in the 2014 compensation packages.

For example, at the beginning of 2014, Mr. Moorman was undoubtedly more concerned about the effect of his decisions on the \$50,115,175 of NSC equity that he already owned than on the \$7,504,398 in contingent equity that NSC awarded him at that time. Similarly, Mr. Dimon was undoubtedly more concerned about the effect of his decisions on the \$366,276,046 of JPM equity that he already owned than on the \$11,100,000 of contingent equity JPM awarded to him for 2014. Put another way and focusing on the incentive power of contingent equity awards, the 2014 award to Mr. Moorman did not *further* encourage him to make decisions favorable to NSC shareholders beyond the encouragement provided by the \$50,115,175 equity stake he already held. Similarly, the 2014 contingent equity award to Mr. Dimon did not *add* any incentive to make decisions designed to increase the JPM share price that his existing \$366,276,046 equity stake did not already provide.

Indeed, when the CEO holds as much equity as Mr. Dimon—more than eighteen times his *entire* 2014 compensation—it is hard to see how *any* of the 2014

that information or refrain from trading). Executives can work around this limitation by creating, at a time when they do not have material inside information, plans that put future sales on automatic pilot by sales according to pre-set formulae or discretionary sales by money managers over whom the executives exercise no control. 17 C.F.R. § 240.10b5-1(c) (2017).

compensation would much affect his decision making, which would be dominated by his enormous equity stake. The same may have been true for Mr. Moorman—whose existing equity stake was 3.7 times his entire 2014 compensation—though this speculation is less compelling than for Mr. Dimon.

But note that the effect of already-held equity on the efficacy of annual contingent equity awards varies from CEO to CEO. Thus, while Mr. Moorman's existing equity stake was worth 6.68 times the reported value of his contingent equity awards for 2014 and Mr. Dimon's existing stake was worth thirty-three times his contingent equity award for that year, the existing equity stakes owned by Mr. Krzanich at Intel and Mr. Gorsky at J&J were, respectively, only 1.24 and 1.02 times each of those executive's 2014 contingent equity awards. Therefore, the 2014 awards to them provided incentives that were *not* swamped by their holdings before the awards were made.

Mr. Krzanich and Mr. Gorsky were in this different position because, at the beginning of 2014, both of them were relatively new to their CEO positions, having ascended to their posts in May 2013 and April 2012, respectively.²¹⁰ By contrast, Mr. Moorman and Mr. Dimon had been in their positions since late 2005.²¹¹

All of this suggests that a company that does not consider, before making a new equity award to its CEO, the amount of equity the CEO already owns—both in absolute terms and in comparison to the new equity award contemplated—risks paying in a currency that will provide no marginal motivation. It suggests as well that a company making equity awards annually over several years of a CEO's tenure—and forcing the executive to keep a large amount of that equity—risks, as the years go by, awarding equity that provides progressively weaker incentives.

²¹⁰ See Intel 2015 Proxy Statement, *supra* note 14, at 11; J&J 2015 Proxy Statement, *supra* note 16, at 18; see also *supra* Table 3.

²¹¹ See NSC 2015 Proxy Statement, *supra* note 12, at 13; JPM 2015 Proxy Statement, *supra* note 20, at 13; see also *supra* Table 3.

4. Total Individual Wealth

The last subpart makes the point that the differing amounts of equity that CEOs hold in their companies affect the motivating power of additional contingent equity awarded in a given year. But the relationship between pay and the CEO's *total* wealth—not just that consisting of company equity but *all* of the CEO's wealth—is also important to compensation decisions.

CEOs are very highly paid, as the total compensation figures in Table 4 attest.²¹² Particularly after occupying the top position for many years, a CEO's individual wealth may increase very considerably. Not only will the CEO likely accumulate wealth in the form of company equity, but he or she also may save or invest the cash received in compensation, and may sell some of the equity received and save or invest the cash proceeds from those sales. The CEO may therefore invest in all kinds of assets—stocks issued by other companies, bonds, real estate, and interests in partnerships or limited liability companies. This wealth, too, may grow over time. CEOs may also inherit assets. In short, CEOs may become rich.

If they are rich, it may be harder to motivate them through compensation, regardless of the form that compensation takes. As an example, paying \$5 million in contingent compensation (cash or equity or any combination) to an individual with a total net worth of \$3 million may motivate considerably. But paying \$5 million in contingent compensation to an individual with \$200 million in net worth may motivate little or not at all. The theoretical statement of this instinctual truth is that the marginal utility of each additional dollar from compensation declines with the total

²¹² See also LARCKER & TAYAN, GOVERNANCE MATTERS, *supra* note 25, at 222 (showing median compensation at 100 of the largest U.S. companies in 2013–14 at \$13,713,000, and median compensation at the next largest 400 companies at \$10,656,000).

number of dollars the individual already has.²¹³ Such theoretical analysis suggests that, in considering the amount needed to incentivize, it may make more sense to think of incentive compensation equaling some percentage of the CEO's total wealth, rather than to think of it as equal to an absolute dollar amount.²¹⁴ That leads quickly to the thought that, as the CEO's wealth grows, so does the amount needed to motivate.

A company that fails to learn its CEO's total wealth and consider whether the pay the company is prepared to offer will incentivize in light of that wealth, risks paying a lot, but not enough to affect top officer decisions. And a company that pays large amounts to its CEO over many years risks making the CEO so wealthy that the pay the company can afford will motivate no longer. In this sense again, it is foolish for a company to construct CEO pay without considering the particular circumstances of the man or woman at the top.

IV. HOW TO ENCOURAGE RATIONALITY

The previous Part demonstrates that a company risks grave error when it designs a large, complex CEO compensation package, heavy on contingent equity, without learning and taking into account key individual traits and financial circumstances, which could include:

- The degree to which the CEO believes that he or she can confidently predict a straight line from his or her decisions through the multiple metrics and equity vehicles in the pay package to personal economic rewards;

²¹³ JOACHIM WEIMANN ET AL., MEASURING HAPPINESS: THE ECONOMICS OF WELL-BEING 118 (2015) (referring to “the diminishing effect of absolute income changes . . .”).

²¹⁴ *See id.* (suggesting that “it isn't the absolute change in income” that affects life satisfaction “but the percentage change in income”).

- The degree to which the CEO usefully concentrates on manifold goals, some of which provide only a small reward;
- The CEO's risk aversion in his or her personal financial affairs;
- The accumulated equity that the CEO owns, both in absolute amounts and in comparison with a contemplated grant of additional contingent equity;
- Whether the CEO applies a hyper-discount rate to future economic rewards; and
- The CEO's total wealth.

Since companies do not take such critical facts into account now, this Part turns to legal reforms that would encourage them to do so. The reforms fall into two categories: substantive reform through state law and disclosure reform through federal law.

Before describing them, however, it is important to emphasize that this Article proposes a true sea change in compensation. It argues that companies should systematically take into account a whole new set of factors to which they do not now pay attention in an organized and determined way. Since this Article proposes this revolution at publicly traded firms that have enormous impact on the nation's economy and since the conventional wisdom is that the incentive compensation currently paid to CEOs vitally affects the success and direction of these key parts of America's economic engine, considerable restraint is in order.

The transition of academic theory and empirical research to widespread application in the real world will likely be difficult. Each compensation committee will have to satisfy itself that it can obtain reasonably accurate information on the relevant psychological characteristics of its CEO, and his or her unique financial circumstances. It must determine the extent to which it will probe the privacy of its CEO in order to obtain this information. It must conclude that, once discovered, this information will contribute to the creation of better compensation packages and that the company can

communicate that improvement to shareholders in a meaningful way that still protects CEO privacy. Shareholders, too, will have to adjust to the inclusion of these new factors in compensation design.

All of this will take time, and the manner in which it is accomplished will evolve. Some companies will move more quickly than others. Different companies will experiment with different techniques to measure and weight different psychological factors. Some companies may decide that the existing infrastructure—both inside the company and at compensation consultants—is insufficiently robust to incorporate any of these factors yet. Moreover, the problems created by some individual variables—such as a CEO’s total wealth dwarfing his or her compensation to such an extent that the compensation incentives have no significant economic effect on decision-making—can be recognized, but not “solved.”

Accordingly, the reforms below allow companies a substantial range of freedom. The reforms require attention to the individual personality and circumstances of a CEO but do not demand that a compensation committee proceed doggedly through a checklist. Still less do they contemplate some rigid grid mandating that a compensation committee score a CEO on each of several specified personality and financial factors, then look for the box on the grid containing the ideal compensation scheme.

So, an imposed revolution on public companies, yes. But one without dogma. And the companies fill in the details themselves.

A. State Reform of the Duty of Care

The independent directors at each public company set CEO pay, with the compensation committee taking the lead.²¹⁵ Each director participating in decisions made by the full board, and each director participating in decisions by the compensation committee, owes a duty of care to the

²¹⁵ See *supra* notes 73 and 74 and accompanying text.

corporation.²¹⁶ The law of the state in which the company is incorporated defines that duty.²¹⁷ In broad brush, “[t]he duty of care requires that directors ‘use that amount of care which ordinarily careful and prudent men [and women] would use in similar circumstances.’”²¹⁸ As a practical matter and assuming that the directors will not personally benefit from a decision, the business judgment rule protects directors from personal liability for violating the duty of care when making a decision unless they commit gross negligence in collecting and considering the information that is reasonably available and relevant to that decision.²¹⁹ By employing this standard, courts avoid second-guessing business judgments and focus on the *process* by which boards reach a decision, rather than the *wisdom* of the actual choice, with the exception that the duty of care prohibits extreme substantive decisions that cannot conceivably benefit the corporation and effectively constitute waste.²²⁰

Directors can virtually ensure that they satisfy their duty of care, as applied through the business judgment rule, if they make a decision after advice from an expert. Thus, Delaware General Corporation Law section 141(e) provides that,

[a] member of the board of directors, or a member of any committee designated by the board of directors, shall, in the performance of such member’s duties, be *fully protected* in relying in good faith upon . . .

²¹⁶ See ARTHUR R. PINTO & DOUGLAS M. BRANSON, UNDERSTANDING CORPORATE LAW §§ 8.01, 8.01[A], 8.03, 8.03[A], 8.03[B] (4th ed. 2013).

²¹⁷ *Id.* § 1.09.

²¹⁸ EDWARD P. WELCH ET AL., FOLK ON THE DELAWARE GENERAL CORPORATION LAW: FUNDAMENTALS § 141.02[A][1] (2016) (quoting *In re Walt Disney Co. Derivative Litig.*, 907 A.2d 693, 749 (Del. Ch. 2005), *aff’d*, 906 A.2d 27 (Del. 2006)).

²¹⁹ *Aronson v. Lewis*, 473 A.2d 805, 812–13 (Del. 1984), *rev’d on other grounds*, *Brehm v. Eisner*, 746 A.2d 244, 253–54 (Del. 2000).

²²⁰ See *In re Caremark Int’l Inc. Derivative Litig.*, 698 A.2d 959, 967–68 (Del. Ch. 1996); see also *Binks v. DSL.net, Inc.*, C.A. No. 2823-VCN, 2010 WL 1713629, at *5 (Del. Ch. Apr. 29, 2010); *In re Walt Disney Co. Derivative Litig.*, 906 A.2d 27, 74 (Del. 2006).

any . . . person as to matters the member reasonably believes are within such other person’s professional or expert competence and who has been selected with reasonable care by or on behalf of the corporation.²²¹

If the directors consult an expert, it is highly unlikely that their decision-making process is grossly negligent.

All of these general rules apply to directors as they make compensation decisions, as shown by the case against the directors of the Walt Disney Company (“Disney”). The plaintiff shareholders asserted that the Disney directors violated their duty of care in hiring Michael Ovitz as president of the company by an employment agreement that, as it turned out, granted him a severance valued at \$130 million after a non-fault termination only fourteen months into his tenure.²²² Invoking the business judgment rule, the directors won the case, in part because directly or indirectly they relied on advice from a compensation consultant.²²³

²²¹ DEL. CODE ANN. tit. 8, § 141(e) (2017).

²²² The Walt Disney case produced three important published opinions. *Brehm v. Eisner*, 746 A.2d 244 (Del. 2000) affirmed in part and reversed in part rulings of the trial court on motions to dismiss. *In re Walt Disney Co. Derivative Litig.*, 907 A.2d 693 (Del. Ch. 2005) granted judgment to the defendants after a trial on all claims that the court in *Brehm* did not dismiss. *In re Disney*, 906 A.2d at 35, affirmed that judgment after trial. For the express application of the general principles set out in text at *supra* notes 218–221 to hiring Ovitz by an employment agreement with the rich severance package, see *Brehm*, 746 A.2d at 258–64, *In re Disney*, 907 A.2d at 745–50, 760–771, and *In re Disney*, 906 A.2d at 51–62.

²²³ *In re Disney*, 907 A.2d at 702–03 (the chair of the Disney compensation committee (Russell) took the lead in negotiating the employment agreement with Ovitz); *id.* at 704–05 (Russell and one other member of the Disney compensation committee (Watson) worked with a compensation consultant (Crystal) to analyze the agreement with Ovitz, with Crystal and Watson preparing spreadsheets to value the agreement); *id.* at 763–65 (Russell did not violate his duty of care because he had extensive information—from his negotiations with Ovitz over the agreement and his analyses with Watson and Crystal—and so was not “grossly negligent (in that he failed to inform himself of all material information reasonably available in making [the] decision”); *id.* at 765 (Watson did not violate his duty of care because he “conducted extensive

Delaware courts could work a simple but highly effective reform by holding that the individual characteristics of a CEO—including such characteristics as the CEO’s appetite or distaste for complexity in pay, his or her risk aversion in personal finances, the proportion of the CEO’s wealth tied up in company equity, and the total amount of the CEO’s wealth—can constitute reasonably available information relevant to the construction of a CEO’s pay package. Under such a holding, a compensation committee, in order to satisfy its duty of care, would have to collect and consider that type of information or at least reach a reasoned conclusion that it could not reliably or usefully do so. Such a holding—by the Delaware courts alone—would effectively require the majority of public companies to collect and consider such vital information, or deliberately decide against that step, because more than 66% of all publicly traded companies in the United States are incorporated in Delaware²²⁴ and therefore must apply Delaware law to their directors.²²⁵ Boards of companies incorporated in other states might well

analyses of Ovitz’s proposed compensation package, sharing those analyses with Crystal and Russell” at a meeting and discussions with them after that meeting, and because he participated in determining a particular change in the options granted to Ovitz that occurred before the committee vote on the agreement); *id.* at 765–80 (the other two members of the compensation committee did not violate their duty of care in part because, by being briefed by Russell and Watson before voting, they “relied on the information, opinions, reports and statements made by Crystal, even if Crystal did not relay the information, opinions, reports and statements in person to the committee as a whole”); *see also In re Disney*, 906 A.2d at 59 (noting that Watson and Russell related the substance of Crystal’s analysis and information to the compensation committee, which therefore was protected by Del. Code § 141(e)).

²²⁴ *About Agency, Division of Corporations*, ST. DELAWARE, <https://corp.delaware.gov/aboutagency.shtml> [https://perma.cc/ZN7R-U9WX] (last visited May 22, 2017).

²²⁵ *See supra* note 217; *In re MS55, Inc.*, Civil Action No. 10–cv–00042–PAB, 2011 WL 1084967, at *5 (D. Colo. Mar. 21, 2011); Randy J. Holland, *Delaware’s Business Courts: Litigation Leadership*, 34 J. CORP. L. 771, 779–82 (2009).

follow suit, because courts outside Delaware frequently find Delaware corporate law decisions persuasive.²²⁶

The directors at a company would violate this duty only if they committed gross negligence in assembling data on their CEO. Since Part III suggests that there is no one magic formula to follow in tailoring compensation to, for example, estimates of a CEO's uncertainty aversion and risk aversion, this duty should not weigh too heavily on directors. Boards could effectively protect themselves from duty of care liability by employing experts. Compensation consultants could almost certainly expand their staffs and capabilities to supply such expertise.

Moreover, the loose "gross negligence" standard would permit creative experimentation.²²⁷ Thus, as boards adjust to the new requirement that compensation take into account how individual CEOs value and react to different compensation schemes, different boards might safely take different approaches. Some boards might deem some characteristics more important than others. Some boards might well conclude that any attempt to continue to fine-tune compensation by using multiple metrics and equity vehicles is too speculative to pursue in light of the complicating factors of individual psychology. Some boards might decide that psychological factors beyond those discussed in this Article are important to compensation.²²⁸

²²⁶ See Brian R. Cheffins, *Delaware and the Transformation of Corporate Governance*, 40 DEL. J. CORP. L. 1, 25–28 (2015).

²²⁷ See Bayless Manning, *The Business Judgment Rule and the Director's Duty of Attention*, 39 BUS. L. 1477, 1491 ("The heart of the business judgment rule has always been a recognition by the courts that business decisions should not be evaluated retrospectively Sophisticated modern courts further explicitly recognize that the private sector entrepreneurial process cannot operate unless managers are given the latitude to be innovative and experimental and, therefore, to make mistakes.").

²²⁸ For example, one unpublished paper argues that deft use of cash bonuses can help a company get the most out of a narcissistic CEO. Eric de Bodt et al., *The Equilibrium Assignment of Narcissistic CEOs to Firms* 21–22 (Aug. 31, 2015) (on file with author).

But a board could not simply ignore individualized analysis—without at least seriously considering whether this is the best path—because doing so would be grossly negligent, even if an expert advised a board that unstudied ignorance of these variables is the wisest course.²²⁹

Alternatively, Delaware courts could eschew a hard-and-fast duty-of-care rule and state only that the consideration of the CEO's individual characteristics is a "best practice" in compensation decision-making. The Delaware Supreme Court took this tack in the *Disney* litigation. It held that the directors had a legally sufficient grip on the severance package granted to Ovitz at the time they approved his employment agreement, even though they did not have a specific calculation of the severance he ultimately received.²³⁰ But in the course of its analysis, the court added that "[i]n a 'best case' scenario, all [compensation] committee members would have received, before or at the committee's first meeting [on the contract] . . . a spreadsheet or similar document prepared by (or with the assistance of) a compensation expert . . . disclos[ing] the amounts that Ovitz could receive under the [employment agreement] in each circumstance that might reasonably arise"—including "the cost to Disney of a non-fault termination for each of the five

²²⁹ See *Brehm v. Eisner*, 746 A.2d 244, 262 (stating that a shareholder plaintiff in a derivative case can survive a motion to dismiss where an expert has advised the board in its decision-making process by alleging particularized facts that, if proved, would show that a subject matter (in this case the severance cost calculation) that was material and reasonably available was so obvious that the board's failure to consider it was grossly negligent regardless of the expert's advice). By providing this example, this Article does not mean to suggest that compensation committees should start with the notion that they will take an elaborate psychological inventory of their CEO and use the results to fine-tune already complex schemes. The critical characteristics identified by the research summarized above are few and relatively simple—percent of total wealth consisting of company equity, risk aversion, uncertainty aversion, and discount rate applied to future returns.

²³⁰ *In re Walt Disney Co. Derivative Litig.*, 906 A.2d 27, 56–58 (Del. 2006).

years of the initial term.”²³¹ As a foreseeable and practical result of this passage, compensation consultants and lawyers advised clients to prepare “tally sheets” showing termination payments.²³² Similarly, if the Delaware courts were to identify, as a “best practice,” express consideration of such factors as the amenability of the CEO to pay complexity, the discount that the CEO applies to contingent equity compensation, and the effect of the top executive’s total wealth on the company’s ability to incentivize by economic rewards, just that admonition could cause compensation committees to explicitly take such factors into account.

B. Federal Reform of Compensation Disclosure

Each public company must file a Form 10-K each year²³³ and must file with the SEC and distribute to shareholders a federally prescribed proxy statement when soliciting proxies from shareholders for meetings, including director

²³¹ *Id.* at 56.

²³² See Client Letter from Frederic W. Cook & Co., Inc., Landmark Disney Decision Provides Guidance for Compensation Governance (July 28, 2006), http://www.fwcook.com/content/Documents/Publications/7-28-06_Landmark_Disney_Decision_Provides.pdf [<https://perma.cc/8HJ4-PG3H>]; Client Update from Perkins Coie LLP, Delaware Supreme Court’s Disney Decision Affirms the Business Judgment Rule and Endorses Compensation Committee Best Practices—“Quantify. Discuss. Document.” (June 21, 2006), <https://www.perkinscoie.com/en/news-insights/delaware-supreme-court-s-disney-decision-affirms-the-business.html> [<https://perma.cc/H844-8J3G>]. The Disney litigation was not, however, alone in focusing board attention on the details of termination payments. In 2006, the SEC overhauled the executive compensation disclosure rules. Executive Compensation and Related Person Disclosure, Final Rule, 71 Fed. Reg. 53,158 (Sept. 8, 2006). The new rules, *id.* at 53,250, 17 C.F.R. § 229.402(j) (2017), require identification of any circumstances triggering payments on termination and, for each circumstance, require the company to describe and quantify the payments.

²³³ Companies with securities registered under section 12 must file annual reports on the form prescribed by the SEC. 17 C.F.R. § 240.13a-1 (2017). The SEC prescribes Form 10-K as the default form for annual reports. 17 C.F.R. § 249.310(a) (2017).

elections.²³⁴ SEC rules require public companies to disclose executive compensation in both their Form 10-K and proxy statements.²³⁵ Companies typically provide the executive compensation disclosure in their proxy statements and incorporate that disclosure into their Forms 10-K by reference.²³⁶

The compensation disclosure is extraordinarily far-reaching and detailed. A summary table lists all categories of compensation that the company paid to its five NEOs in the preceding year and the dollar amounts in each category paid to each executive.²³⁷ Where the amount of the compensation is fixed—as is true of the salary paid for the year and the annual bonus actually awarded for the year—the company must disclose the amount paid.²³⁸ Where the compensation takes the form of equity, such as awards of restricted stock or options or performance shares, the company must disclose the cost to the company according to accounting rules.²³⁹

²³⁴ 15 U.S.C. § 78n(a)(1) (2012).

²³⁵ Form 10-K Part III, Item 11 (2012) (requiring the information in Item 402 of Regulation S-K (17 C.F.R. § 229.402 (2017))); 17 C.F.R. § 240.14a-101 (Schedule 14A) Item 8(a) (2017) (same).

²³⁶ Form 10-K, General Instruction G(3) (2012) (“The information required by Part III (Items 10, 11, 12, 13 and 14) may be incorporated by reference from the registrant’s definitive proxy statement.”).

²³⁷ 17 C.F.R. § 229.402(c) (2017).

²³⁸ The salary and annual bonus to be paid to an NEO based on the results from year one would normally be paid to that officer before the company files its proxy statement in year two, or is calculable by that time. If not, the company must so explain in a footnote to the summary compensation table and must later file a Form 8-K to disclose the dollar amount of salary or bonus when it is calculated. 17 C.F.R. § 229.402 Instruction 1 to 402(c)(2)(iii) and (iv) (2017).

²³⁹ 17 C.F.R. § 229.402(c) (2017) requires companies to provide a summary compensation table for the NEOs. The regulation requires separate columns for (i) stock awards, including restricted stock and performance shares, and (ii) stock options—in each case reporting “aggregate grant date fair value computed in accordance with FASC ASC Topic 718.” 17 C.F.R. § 229.402(c)(v), (vi) (2017). The PwC publication setting out the rules governing the computation of that value, *supra* notes 150–156 and accompanying text, elaborates that ASC Topic.

But the disclosures go further. They include a table showing the estimated future payouts of equity and non-equity incentive plans.²⁴⁰ All outstanding options, executive by executive, held at the end of the preceding year—both vested and unvested, with exercise prices and expiration dates—appear in a different table, which also reports all other unvested equity shares.²⁴¹ Yet another table sets out, NEO by NEO, the number of shares acquired in the preceding year by exercising options and vesting of stock awards and the realized value of the exercise or vesting.²⁴² Other tables show the pension benefits for each of the NEOs, including the actuarial present value of accumulated benefits;²⁴³ each one's deferred compensation, including withdrawals during the preceding year and balances at the end of the year;²⁴⁴ the amounts of compensation and types of compensation to which each NEO would be entitled if the company were taken over;²⁴⁵ and the amount and nature of company equity securities that each of the executives owns.²⁴⁶ The SEC also requires that each company include a CD&A that describes how and why it chose to compensate the executives as it did.²⁴⁷

Although extensive, none of the existing rules requires that the company describe how, or even whether, the company's compensation committee considered the CEO's personal characteristics or financial condition in creating the CEO's pay package. True, the regulations require disclosures that, if plucked out and organized differently, would permit shareholders to analyze the relationship between some individualized factors—such as the size of contingent equity

²⁴⁰ 17 C.F.R. § 229.402(d) (2017). The table includes for each of the NEOs the threshold, target, and maximum dollar and share payouts. *Id.*

²⁴¹ 17 C.F.R. § 229.402(f) (2017).

²⁴² 17 C.F.R. § 229.402(g) (2017).

²⁴³ 17 C.F.R. § 229.402(h) (2017).

²⁴⁴ 17 C.F.R. § 229.402(i) (2017).

²⁴⁵ 17 C.F.R. § 229.402(t) (2017).

²⁴⁶ 17 C.F.R. § 229.403(b) (2017).

²⁴⁷ *See supra* note 71 and accompanying text.

awards in a yearly pay package in relation to the total equity that a CEO owns outright or holds in the form of vested, in-the-money options. But the rules do not require report of, for example, any data that shareholders could use to reliably compute the CEO's total wealth or reaction to compensation complexity.

The SEC could close this gap. Currently, regulations require CD&As in proxy statements²⁴⁸ and include (i) a list of seven items that a CD&A “shall” address,²⁴⁹ and (ii) a list of fifteen items that it “may” address.²⁵⁰ The SEC could add the following to the first list, thereby mandating that each company disclose: “(viii) how the company integrated the individual characteristics and financial circumstances of its CEO into the compensation decisions for that officer.”²⁵¹

Since this is only a disclosure requirement rather than a substantive one, a company could respond to this requirement by reporting that it did not integrate such considerations into its CEO compensation decisions at all. For that reason, the rule might most usefully be written to permit such a response, but to require a company selecting this path to explain *why* it did not consider such information. Thus the SEC could add to the words suggested above: “and, if the company did not collect and consider such individual characteristics and circumstances in determining the compensation of its CEO, why the company did not do so.”

The federal government has used such phrasing before to effectively push companies to take a step that a law or regulation seeks to promote, counting on companies' aversion

²⁴⁸ 17 C.F.R. § 240.14a-101 Item 8 (2017), requiring disclosure of all information specified by 17 C.F.R. § 229.402 (2017) in a proxy statement seeking authority to vote shares at a public company in an election of directors, with the CD&A specified in 17 C.F.R. § 229.402(b) (2017).

²⁴⁹ 17 C.F.R. § 229.402(b)(1) (2017).

²⁵⁰ 17 C.F.R. § 229.402(b)(2) (2017).

²⁵¹ The regulation calls the company “the registrant.” This Article substituted the word “company” for readability. Similarly, the regulation refers to a company's “principal executive officer.” This Article substituted “CEO.”

to the public embarrassment of explaining why they have not done what the law or regulation presumes to be desirable. For example, Sarbanes-Oxley Act section 407 required the SEC to issue regulations requiring public companies to disclose “whether or not, and if not, the reasons therefor, the audit committee . . . is comprised of at least 1 member who is a financial expert, as such term is defined by the Commission.”²⁵² The SEC adopted this rule²⁵³ and required public companies to comply beginning in either 2003 or 2004, depending on the size of the company and the calendar year date on which its fiscal year ended.²⁵⁴ A decade later, virtually all large public companies had at least one director on their audit committees who was an “audit committee financial expert,” and a majority had more than one.²⁵⁵ This experience suggests that the SEC requirement this Article proposes—although phrased only as a disclose-or-explain mandate—has a high probability of moving companies to incorporate CEO personal characteristics and circumstances into their CEO compensation decisions.²⁵⁶ Almost certainly, it would cause companies to at least consider whether they

²⁵² Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 407, 116 Stat. 745, 790 (2002) (codified at 15 U.S.C. § 7265 (2012)).

²⁵³ 17 C.F.R. § 229.407(d)(5)(i) (2017). The qualifications for an “audit committee financial expert” appear at 17 C.F.R. § 229.407(d)(ii) and (iii) (2017).

²⁵⁴ Disclosure Required by Sections 406 and 407 of the Sarbanes-Oxley Act of 2002, 68 Fed. Reg. 5110, 5110 (Jan. 31, 2003).

²⁵⁵ DELOITTE, CURRENT TRENDS IN AUDIT COMMITTEE REPORTING 1 (2015) (based on then most recent proxy statements of companies in the S&P 100); *id.* at 2 (“Every company covered by our analysis disclosed that it had at least one financial expert, and 76 percent [had] more than one financial expert.”).

²⁵⁶ See Eric Alden, *Blocking the Ax: Shielding Corporate Counsel from Retaliation as an Alternative to White Collar Hypercriminalization*, 36 U. HAW. L. REV. 95, 151 n.178 (pointing to the audit committee financial expert regulation as an example of shaming disclosures that have proven effective in inducing changes in corporate behavior and stating “[d]esirous of avoiding [an] embarrassing disclosure, public companies generally strive to find audit committee financial experts whenever possible”).

should tailor pay to the personality and personal finances of their top officers.

The rule proposed should be interpreted to permit companies to identify what individual characteristics and financial factors the company took into account, without providing additional specifics. Thus a company could report that it took its CEO's total wealth into account in creating his or her pay package without revealing the amount of that wealth, or its composition. Similarly, a company could disclose that it took into consideration the risk aversion of its CEO in personal financial affairs without revealing any measurement of that aversion. The CEO's privacy could remain intact. A majority of companies probably would choose this path.

C. Whether the Reforms Are Fair

While these proposed reforms are useful, it is important to consider whether they are fair. In particular, are the reforms fair to CEOs? And are the reforms fair to shareholders?

Bluntly, the reforms propose that each compensation committee analyze the psyche of its CEO. The CEO might consider this an unfair invasion. But more than likely, he or she would not. Corporate America uses psychological testing widely today and has for many years. The American Management Association found in a 1999 survey that 46% of employers used some form of psychological testing.²⁵⁷ In 2013, 57% of large U.S. companies used pre-hire assessments that included tests probing for personality traits as well as technical skills.²⁵⁸ Far from restricting psychological

²⁵⁷ American Management Association, *1999 AMA Survey on Workplace Testing*, MGMT. REV., July-Aug. 1999, at 44, 46.

²⁵⁸ Lauren Weber, *Today's Personality Tests Raise the Bar for Job Seekers*, WALL ST. J. (Apr. 14, 2015, 11:13 PM), <http://www.wsj.com/articles/a-personality-test-could-stand-in-the-way-of-your-next-job-1429065001.html> [https://perma.cc/6WLH-UXAK]; see also Lauren Weber & Elizabeth Dwoskin, *Are Workplace Personality Tests Fair?*, WALL ST. J. (Sept. 29, 2014, 10:30 PM), <http://www.wsj.com/>

evaluations to new hires for lower-level positions, companies administer such tests to top executive aspirants as well.²⁵⁹ A survey of 82 predominantly large U.S. companies in 2013 found that 39 gave personality tests to “high potential” employees and 34 to “senior executives.”²⁶⁰ Even aspiring CEO candidates can find themselves scrutinized by head-doctors before hiring.²⁶¹ Thus, while the particular mind-probing this Article suggests may be new to CEOs, they will not find novel the notion that their companies take a psychological inventory that affects their careers. And if most companies choose to disclose only the fact that they are considering results of personality tests and investigations of financial circumstances—without also disclosing the results

articles/are-workplace-personality-tests-fair-1412044257 [https://perma.cc/3FTX-8L4C].

²⁵⁹ Joann S. Lublin, *Employers Put Executive Job Candidates to the Test*, WALL ST. J. (May 12, 2011, 2:41 PM), <http://www.wsj.com/articles/SB10001424052748703730804576319231860529442> [https://perma.cc/LN6D-N9F8].

²⁶⁰ Allan H. Church & Christopher T. Rotolo, *How Are Top Companies Assessing Their High-Potential and Senior Executives? A Talent Management Benchmark Study*, 65 CONSULTING PSYCHOLOGY J.: PRAC. & RES. 199, 204–05, 207 (2013) (describing 95 companies from which responses sought and reporting that responses came back from individuals at 84). The survey showed that 59 of the 84 used “assessments” for “high-potential” employees (defined as employees “below the VP level who [are] seen as having the capability to progress into leadership positions two or more levels beyond their current role”) or “senior executives” (defined as “leaders in the mid- to upper leadership levels in the organization (e.g., Vice President and above), regardless of whether they are considered high-potential or not”). *Id.* at 206–07. Among those employing assessments, 66% (or 39) used “personality inventories” for assessing high-potentials and 57% (or 34) for assessing senior executives. *Id.* at 210.

²⁶¹ Joanna Pachner, *Why Top Companies Are Sending Their CEO Candidates to the Psychologist*, CANADIAN BUS. (Dec. 9, 2014), <http://www.canadianbusiness.com/leadership/why-top-companies-are-sending-their-ceo-candidates-to-the-psychologist> [https://perma.cc/4D3Q-HTFX]; see also Lublin, *supra* note 259 (describing the assessment of a candidate for the CFO position at Becton, Dickinson & Co., which included a long session with a psychologist and online tests for personality and strategic thinking).

of those tests or any of the dollar amounts of the financial circumstances—the CEOs' privacy will not suffer.

Moreover, if the compensation committees do their jobs well, CEOs will be pleased with the results. Top executives who are frustrated by complex schemes will be relieved when they receive simpler pay packages. CEOs who are already glutted with company equity will receive far fewer (or no) contingent shares that they value little, but more cash that they value much. Top executives who are particularly risk averse in their personal financial affairs, as determined by an analysis of their personal investment decisions in the past, will be pleased to receive more of their incentive payments in cash and less in contingent equity.

It is quite possible that express consideration of personality and financial circumstances will reduce some CEOs' *reported* pay. As subpart III.B.2 shows, that objective cost, particularly for contingent equity, may be vastly in excess of the subjective value conveyed to the CEO. For that reason, a company concluding that its CEO is highly risk averse in his or her personal financial affairs and finding that a high proportion of the CEO's personal wealth is already invested in company equity, may decide that it can convey the same subjective value to its CEO by substituting, for contingent equity, an amount of cash that is less than the company's cost of that equity. A drop in reported pay may bruise a CEO's ego even if he or she receives a pay package with the same or more subjective value as the pay package it replaces. That, however, is a fair price for pay rationality.

Whether the reforms are fair to shareholders is a closer call. If the compensation committees do their jobs well, shareholders will benefit, as the individuals running the companies in which the investors place their money will receive more rational remuneration. And arguably, pay (measured by cost to the company) will decrease—at least at those companies that are now making large, expensive contingent equity grants to CEOs with high risk aversion and a high percentage of their total assets in company stock.

On the other hand, if companies respect the privacy of their top executives, they will disclose only that they are, for

example, taking the CEO's total wealth into account, without disclosing that wealth. Shareholders therefore will not be able to evaluate *how well* the companies are applying individual characteristics and circumstances in determining CEO pay, only that the companies are now considering that data. The shareholders' proxy advisors will find themselves in the same position. In that sense, pay-setting will be more opaque. But weighing the increased opacity against the improved rationality, the balance seems fair. The theory of the modern public corporation is that the board runs the company, not the shareholders. Necessarily, where operations are vast and varied and shareholders meet but once a year, the board will be privy to facts that the shareholders do not have.

V. CONCLUSION

Elaborate CEO compensation structures pile one type of pay on top of another. The attention lavished on these schemes, as well as their cost, testifies to their importance. Yet the companies pay no heed to the personality or circumstances of the individuals whom the schemes are supposed to motivate. The companies concentrate instead on abstract design. It is as though they are picking extremely expensive suits for mannequins.

Top executive compensation should be tailored to the individual CEO. Bespoke suits only, please.

**APPENDIX A. CEO COMPENSATION AT NSC IN
2014, REPORTED IN 2015 PROXY STATEMENT**

Category	Explanation
A salary ²⁶²	Cash
A yearly grant of restricted stock units (“RSUs”) ²⁶³	<p>Each RSU grant settled five years after the date of the grant by transferring to Mr. Moorman shares of NSC common stock equal to the number of RSUs in the grant.²⁶⁴</p> <p>During the five-year vesting period, NSC paid Mr. Moorman amounts equal to the dividend payments made to other NSC shareholders on a number of shares equal to the number of RSUs in the grant (“dividend equivalent payments”).²⁶⁵</p> <p>Because he received an RSU grant each year and because each grant vested after five years, at any given time Mr. Moorman had, through his RSU grants, common stock coming to him in tranches this year, next year, and in each of the three following years.²⁶⁶</p>

²⁶² NSC 2015 Proxy Statement, *supra* note 12, at 54, 62.

²⁶³ *Id.* at 65 (column (i) in Table titled “2014 Grants of Plan-Based Awards”); *id.* 66 (explaining that column as “represent[ing] grants of restricted stock units”).

²⁶⁴ *Id.* at 67.

²⁶⁵ *Id.*

²⁶⁶ At the beginning of 2015, Mr. Moorman possessed RSUs that would, if vested, provide him with the following number of NSC shares in each of the following years:

Date RSU to be Settled	1/29/15	1/27/16	1/26/17	1/24/18	1/23/19
Shares	17,500	14,000	12,000	14,000	11,950

Id. at 69.

Category	Explanation
A yearly grant of performance share units (“PSUs”)	<p>A grant set a maximum number of NSC common shares that Mr. Moorman could receive at the end of a three-year cycle beginning when the grant is made.²⁶⁷</p> <p>The maximum number of shares in a grant divided into two equal parts, with the number of shares actually transferred at the end of the three years in each of these halves dependent on NSC’s performance along a different variable—</p> <p><i>First Half.</i> The number of shares transferred depended on the three-year average after-tax return on average invested capital (“ROIC”),²⁶⁸ with a minimum of a 13% ROIC necessary for any shares in this half to transfer and the number of shares then increasing until all the shares in this half are awarded if ROIC reaches 20%;²⁶⁹</p> <p><i>Second Half.</i> The number of shares transferred depended on NSC’s total shareholder return (“TSR,” which includes stock price appreciation and dividends) over the entire three-year performance cycle, as compared with the TSR at the five other publicly traded North American Class I Railroads (“NACIRRs”) (with 0% of this half of the maximum number of shares transferred if NSC ranked fifth or sixth among NACIRRs in TSR, 25% transferred if NSC ranked fourth, and an additional 25% added with each place above fourth up to 100% if NSC’s TSR was the best among all NACIRRs), provided that if NSC’s TSR exceeded the median TSR for S&P 500 companies, 40%</p>

²⁶⁷ *Id.* at 65–66 & n. to columns (f), (g) & (h); NSC 2015 10-K, *supra* note 2; *id.* at Ex. 10.6, Norfolk Southern Corporation Long-Term Incentive Plan Award Agreement Performance Share Units at ¶ 3 (2014) [hereinafter 2014 NSC PSU Award Agreement]. The PSUs convert into shares of NSC common stock at the end of the three-year cycle. *Id.*

²⁶⁸ 2014 NSC PSU Award Agreement, *supra* note 267, at ¶ 3(b).

²⁶⁹ NSC 2015 Proxy Statement, *supra* note 12, at 57 (“Return on average invested capital for this purpose is calculated by dividing Norfolk Southern’s net operating profit after-tax (defined as net income excluding interest expense, and adjusted for the effect of capitalizing Norfolk Southern’s operating lease obligations) by the average invested capital (defined as the average of the current and prior year-end stockholders’ equity and total debt balances, which is then adjusted for the effect of capitalizing NSC’s operating lease obligations).”).

Category	Explanation
A yearly grant of performance share units (“PSUs”) (continued)	<p>of this one-half of the shares would transfer to Mr. Moorman regardless of NSC’s TSR rank among the NACIRRs.²⁷⁰</p> <p>The number of shares awarded from each one-half of the maximum number of shares depended only on the variable relevant to that half and was independent of the variables governing awards from the other half.²⁷¹</p> <p>At any given time, Mr. Moorman was in the last year of a three-year PSU cycle, the second-to-last year of another cycle, and the first year of yet a third cycle.</p>
An annual cash incentive payment ²⁷²	<p>NSC set the criteria for an annual bonus not later than 90 days into the relevant year.²⁷³</p> <p>For 2014, Mr. Moorman’s maximum bonus opportunity was 250% of salary,²⁷⁴ which was \$1,000,000²⁷⁵—so that the total possible bonus was \$2.5 million, an amount that could be adjusted downward at the Compensation Committee’s discretion and with the expectation that the committee would reduce the maximum bonus opportunity to 225% of salary or \$2,250,000.²⁷⁶ The amount actually awarded was a percentage of the maximum opportunity determined by three company-wide performance metrics:²⁷⁷ (1) NSC’s operating income (“OI”) for 2014,²⁷⁸ (2) NSC’s operating ratio</p>

²⁷⁰ *Id.* at 57; 2014 NSC PSU Award Agreement, *supra* note 267, at ¶ 3(a).

²⁷¹ NSC 2015 Proxy Statement, *supra* note 12, at 57 (“Each half of performance share units granted vests independently of the other half and its respective performance metrics.”).

²⁷² NSC called the payment an “annual incentive award” or “Non-Equity Incentive Plan Compensation.” *Id.* at 54, 62–63.

²⁷³ *Id.* at app. A § 3.

²⁷⁴ *Id.* at 54.

²⁷⁵ *Id.* at 62.

²⁷⁶ *Id.* at 54.

²⁷⁷ *Id.* at 55.

²⁷⁸ NSC’s operating income for 2014 for the purpose of compensation calculations equaled \$3.575 billion. *Id.* at 56. This was the “income from railway operations” shown on the company’s audited financial statements for the year. NSC 2015 10-K, *supra* note 2, at K40. That figure equaled the railway operating revenues minus railway operating expenses (e.g.,

Category	Explanation
An annual cash incentive payment (continued)	<p data-bbox="586 380 1221 527">("OR")²⁷⁹ for the year, and (3) NSC's composite service measure ("CSM") for 2014 (which was "the weighted average of adherence to operating plan, connection performance, and train performance, with weights of 30%, 30% and 40% respectively").²⁸⁰</p> <p data-bbox="586 537 1221 621">To calculate the cash actually paid, NSC first computed the percentage "payout" for each of the three different performance metrics.</p> <p data-bbox="586 632 1221 831">There was no OI payout if OI for the year fell to \$2.25 billion or below. The percentage of the OI payout increased with OIs above that amount. Thus, the OI factor paid out 30% if OI reached \$2.5 billion, 52% if OI reached \$3.05 billion, with increased percentage payouts for larger OIs up to \$3.63 billion, at or above which the OI factor paid out 100%.²⁸¹</p> <p data-bbox="586 842 1221 1041">There was no OR payout if OR for the year was 76% or more. The percentage of the OR payout increased with ORs below 76%. Thus the OR factor paid out 30% if the OR fell to 74.5%, 52% if the OR fell to 71.4%, with increased percentage payouts for lower ORs down to 69.3%, at or below which the OR factor paid out 100%.²⁸²</p> <p data-bbox="586 1052 1221 1201">There was no CSM payout if CSM for the year was less than 73%. The percentage of the CSM payout increased with CSMs above 73%. Thus, the CSM factor paid out 30% if the CSM equaled 73%, 52% if the CSM factor rose to 77.2%, with increased payouts for higher CSM</p>

compensation, fuel, and depreciation). *Id.* Operating income did not include interest on debt. *Id.*

²⁷⁹ Operating ratio is "a measure of the amount of operating revenues consumed by operating expenses." NSC 2015 10-K, *supra* note 2, at K21. Those operating expenses include depreciation. *Id.* at K40 (which shows total railway operating expenses, including depreciation, at \$8.049 billion and railroad operating revenue at \$11.624 billion, so that the operating ratio was 69.2%—the figure reported in the NSC 2015 Proxy Statement, *supra* note 12, at 7).

²⁸⁰ NSC 2015 Proxy Statement, *supra* note 12, at 55.

²⁸¹ *Id.* at 56.

²⁸² *Id.*

Category	Explanation																									
An annual cash incentive payment (continued)	<p>percentages up to 82.5%, at or above which the CSM factor paid out 100%.²⁸³</p> <p>Once NSC had computed the “payout” for each of the three factors, it then weighted those payouts 50% for OI, 35% for OR, and 15% for CSM²⁸⁴ and applied that final percentage to Mr. Moorman’s downward-discretion-adjusted bonus opportunity.²⁸⁵</p> <p>The bonus was subject to a maximum so that “the annual incentive paid to any individual executive under the plan will not exceed the lesser of three-tenths of one percent of NSC’s income from railway operations for the incentive year or ten million dollars.”²⁸⁶</p> <p>In 2014, the company results and resulting factor payouts and weighting were as follows:</p> <table border="1"> <thead> <tr> <th>Factor</th> <th>Performance</th> <th>% of Payout on Factor</th> <th>Factor Weight</th> <th>Sub-total</th> </tr> </thead> <tbody> <tr> <td>OI</td> <td>\$3.575</td> <td>91.2%</td> <td>50%</td> <td>45.6%</td> </tr> <tr> <td>OR</td> <td>69.2%</td> <td>100%</td> <td>35%</td> <td>35%</td> </tr> <tr> <td>CSM</td> <td>69.9%</td> <td>0%</td> <td>15%</td> <td>0%</td> </tr> <tr> <td colspan="5">Total Summary Percentage: 80.6%²⁸⁷</td> </tr> </tbody> </table> <p>At the end of the year, the Compensation Committee exercised its discretion to reduce Mr. Moorman’s bonus opportunity to 225% of his salary.²⁸⁸</p> <p>Thus his actual cash bonus for 2014 was 80.6% of the \$2,250,000 = \$1,813,500.²⁸⁹</p>	Factor	Performance	% of Payout on Factor	Factor Weight	Sub-total	OI	\$3.575	91.2%	50%	45.6%	OR	69.2%	100%	35%	35%	CSM	69.9%	0%	15%	0%	Total Summary Percentage: 80.6% ²⁸⁷				
Factor	Performance	% of Payout on Factor	Factor Weight	Sub-total																						
OI	\$3.575	91.2%	50%	45.6%																						
OR	69.2%	100%	35%	35%																						
CSM	69.9%	0%	15%	0%																						
Total Summary Percentage: 80.6% ²⁸⁷																										

²⁸³ *Id.*

²⁸⁴ *Id.* at 55.

²⁸⁵ *Id.* at 54.

²⁸⁶ *Id.* at 56.

²⁸⁷ *Id.*

²⁸⁸ *Id.* at 54.

²⁸⁹ *Id.* at 62 (Summary Compensation Table, column (g)). The Compensation Committee had the right to reduce Mr. Moorman’s annual cash incentive award on the basis of his individual performance (as opposed to the performance of the company, as reflected in the metrics used to compute the award) but determined that Mr. Moorman, like other executives, had “met or exceeded expectations” and therefore did not reduce his cash incentive payment. *Id.* at 54.

Category	Explanation
An option grant	<p>The exercise price for each option grant equaled the higher of the closing price, or the average of the high and low price, of NSC stock on the effective day of the grant, which was the first day of the trading window in which NSC executives could buy or sell NSC stock after the release of NSC's yearly financial results.²⁹⁰</p> <p>All of the options in a grant vested four years after the grant date.²⁹¹ During the four-year vesting period, Mr. Moorman received dividend equivalent payments for the shares on which he had options.²⁹² Mr. Moorman could exercise the options in a grant at any time after the options vested and before they expired on the tenth anniversary of the grant.²⁹³</p> <p>At any given time, Mr. Moorman had, through these grants, the opportunity to buy stock under options that would vest this year, next year, and each of the following two years, as well as options that had previously vested that he had not exercised but had not yet expired. Since the exercise price was—for the option award in any given year—set at the price of NSC stock</p>

²⁹⁰ *Id.* at 56.

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ NSC states that it may grant options for a term up to 10 years (which includes the vesting period). NSC 2015 10-K, *supra* note 2, at K67 n.12 to NSC and Subsidiaries Notes to Consolidated Financial Statements. NSC states that it granted Mr. Moorman options on 87,880 shares of stock on 1/23/2014, NSC 2015 Proxy Statement, *supra* note 12, at 65, and that options on the same number of shares will expire on 1/22/2024, *id.* at 68, 10 years later.

Category	Explanation
	at the time of that year's award, the exercise prices differed for each grant. ²⁹⁴

²⁹⁴ Thus, at December 31, 2014, Mr. Moorman had options on shares as follows:

No. of Vested Shares Underlying Unexercised Options	No. of Unvested Shares Underlying Unexercised Options	Option Exercise Price	Option Expiration Date
123,030		50.740	01/23/2018
137,500		38.705	01/28/2019
112,500		47.760	01/28/2020
	83,000	62.745	01/26/2021
	76,000	75.140	01/25/2022
	102,000	69.830	01/23/2023
	87,880	94.170	01/22/2024

NSC 2015 Proxy Statement, *supra* note 12, at 68.

APPENDIX B. CEO COMPENSATION AT THE
OTHER FOUR EXEMPLAR COMPANIES IN 2014,
REPORTED IN 2015 PROXY STATEMENTS

Intel Corporation	
Options	None ²⁹⁵
Annual cash incentives	<p>The Compensation Committee set incentive cash target amount, which was then multiplied by a weighted average percentage of three factors:</p> <p>An absolute performance factor = $\frac{\text{current year net income}}{\text{previous year net income}}$</p> <p>A relative performance factor = $\frac{\text{current year Intel \% net income growth}}{\text{current year technology peer group \% net income growth}}$</p> <p>An operational performance factor = the corporate average of percentage achievement of operational performance goals for 10 different groups, each with three to four internal goals, for a total of 32 goals for all groups, with scoring for an operational goal topped at 5%, and this entire percentage subject to a 5% kicker for corporate level executives including the CEO, with 25% weight for the first factor, 25% for the second factor, and 50% for the third factor.²⁹⁶</p>

²⁹⁵ Intel 2015 Proxy Statement, *supra* note 14, at 38 (“[I]n 2014 we ceased granting stock options to our listed officers, so that all of their equity awards are delivered in the form of variable performance-based outperformance restricted stock units (OSUs) and restricted stock units (RSUs), which align their compensation with the long-term interests of Intel’s stockholders by focusing our executive officers on both absolute and relative TSR.”).

²⁹⁶ *Id.* at 42–44, 57–59. The operational goals are a broad mix—e.g., “PC client billing volume,” “Innovate for future leadership: Skylake desktop schedule,” “Launch products shown at CES,” and “Deliver optimized Android* on Intel® architecture (IA) platforms.” *Id.* at 58. The scheme also includes quarterly cash incentive payments, *id.* at 59, which are relatively small (\$133,000 paid to CEO for 2014, *id.* at 54, out of total compensation valued at \$11,197,400, *id.* at 53). The amount of the quarterly payments depends on Intel’s profitability. *Id.* at 59. Included in the quarterly cash incentives, Intel also pays “up to an additional two days

Intel Corporation	
Annual cash incentives (continued)	The Compensation Committee could adjust the incentive payment up or down by 10% to 20% “based on the individual’s performance to enhance the link between individual pay and accountability.” ²⁹⁷
Performance shares & metrics	<p>The Compensation Committee set total value of annual equity awards to NEOs, then divided this value among the officers, with about 60% in target PSUs²⁹⁸ and 40% in RSUs.²⁹⁹</p> <p>The actual number of performance shares depended on Intel’s TSR relative to the TSR for its technology peer group over the three-year performance period following the grant date of the PSUs.</p> <p>Executive receives:</p> <ul style="list-style-type: none"> • 100% of target shares if Intel is within 1% of the peer group median; • if above the median, number of shares increases by 4% for each 1% that Intel’s TSR exceeds the median (up to a maximum of 200% of targeted shares); and • if below the median, number of shares decreases by 2% for each 1% that Intel’s TSR falls below the median <i>but</i> executives receive no shares if Intel’s TSR is more than 25% below the median.³⁰⁰ <p>Performance stock units are settled in common stock.³⁰¹</p> <p>Executive is always in three different three-year performance cycles.</p>

of compensation for each performance year if Intel achieves its customer satisfaction goals.” *Id.* at 45.

²⁹⁷ *Id.* at 43.

²⁹⁸ Intel calls its performance stock units “outperformance restricted stock units” Or “OSUs.” *Id.* at 38. For comparison purposes and because the OSUs are economically the same incentive tool as PSUs, the table refers to the OSUs as PSUs.

²⁹⁹ *Id.* at 45.

³⁰⁰ *Id.* at 46.

³⁰¹ *Id.*

Intel Corporation	
Restricted stock	RSUs for any given award vest in approximately equal amounts quarterly over three years. ³⁰² Executive is always in 12 vesting cycles. RSUs may be settled in common stock unless the compensation committee determines otherwise. ³⁰³
Compensation in equity ³⁰⁴	59% ³⁰⁵

Chevron Corporation	
Options	Management Compensation Committee (“MCC”) set intended grant date value for LTIP equity to CEO, ³⁰⁶ which was then divided into 60% awarded in options and 40% in performance shares. ³⁰⁷ Options vest over three years, 1/3 each year. ³⁰⁸ Options in a particular grant expire 10 years after the grant date. ³⁰⁹ Executive is always in three vesting cycles and up to seven exercise cycles—with different exercise prices for each of the relevant awards.
Annual cash incentives	Annual cash bonus was cash salary times a target percentage set by the MCC (e.g., 150% for the CEO in 2014) ³¹⁰ times a percentage Corporate Performance Rating times an individual performance factor. ³¹¹

³⁰² *Id.*

³⁰³ *Id.* at A-7 (Intel Corporation 206 Equity Incentive Plan, As Amended and Restated Effective May 21, 2015, § 8(b)(v)).

³⁰⁴ Percentages computed from summary compensation tables unless otherwise stated.

³⁰⁵ Intel 2015 Proxy Statement, *supra* note 14, at 53 (computed as reported value of stock awards divided by reported total value of compensation).

³⁰⁶ Chevron 2015 Proxy Statement, *supra* note 18, at 40.

³⁰⁷ *Id.* at 38, 39.

³⁰⁸ *Id.* at 38.

³⁰⁹ *Id.*

³¹⁰ *Id.* at 34, 38.

³¹¹ *Id.* at 34.

Chevron Corporation	
Annual cash incentives (continued)	<p>The Corporate Performance Rating was determined:</p> <ul style="list-style-type: none"> • 40% by financial factors (broken down into earnings and earnings per share, return on capital employed and TSR over one, three, and five years) • 20% by health, environment, and safety (broken down into process safety, personal safety, and environmental performance) • 25% by operating performance (broken down into operating expenses, segment earnings per barrel, production, reserves, and asset utilization rates) • 15% by milestones and commercial (broken down into major capital projects and commercial transactions)³¹² <p>Thus, four factors with an aggregate of 13 different measurements.³¹³</p> <p>The individual performance factor “is largely a personal leadership dimension, recognizing the individual effort and initiative expended and demonstrated progress on key business initiatives during the course of the year” and is based on the MCC’s “judgment.”³¹⁴</p>
Performance shares & metrics	<p>Target number of shares determined by the average price of stock in 20-day period before grant date.³¹⁵</p> <p>Actual number of shares settled determined by Chevron’s TSR rank over three-year performance period, relative to the TSR for performance share peer group consisting of Chevron and four other oil companies.³¹⁶</p> <p>Executive credited with the following percentages of the target shares, depending on Chevron’s rank in the peer group:</p> <ol style="list-style-type: none"> 1. 200%

³¹² *Id.* at 35.

³¹³ Indeed, some of the “measures” appear to incorporate multiple data points. For example, “Total Shareholder Return” includes measures for one, three, and five years. Therefore, it is only one measure, but has multiple inputs. *Id.* at 35.

³¹⁴ *Id.* at 34.

³¹⁵ *Id.* at 40 tbl. n.*, 46 tbl. n.2.

³¹⁶ *Id.* at 38–39. That peer group consists of BP, ExxonMobil, Royal Dutch Shell and Total. *Id.* at 35.

Chevron Corporation	
Performance shares & metrics (continued)	<p>2. 150%</p> <p>3. 100%</p> <p>4. 50%</p> <p>5. 0%³¹⁷</p> <p>Award then settled in cash by multiplying the number of shares credited times the 20-day trailing average price of Chevron stock at the end of the performance period.³¹⁸</p> <p>Executive is always in three performance cycles.</p>
Restricted stock	Company only issues RSUs “from time to time” ³¹⁹ and issued none to the CEO in 2014. ³²⁰
Compensation in equity	52% (including performance shares) but 33% if only options counted as equity ³²¹ given that the performance share awards are settled in cash. ³²²

Johnson & Johnson	
Options	<p>All options in any year’s grant vest at end of three years and are exercisable thereafter until 10 years after grant.³²³</p> <p>Executive is always in three vesting cycles and up to seven exercise cycles, each with a different exercise price.</p>
Annual cash incentives	Annual performance bonus determined by multiplier applied to performance bonus opportunity, ³²⁴ which is

³¹⁷ *Id.* at 39.

³¹⁸ *Id.* at 47–49.

³¹⁹ *Id.* at 40.

³²⁰ See the blank for Watson in the column labeled “Market Value of Shares or Units of Stock That Have Not Vested” in the table on 47, together with note 3 to that table. The column shows that there were RSU awards to three other executives in 2014.

³²¹ Chevron 2015 Proxy Statement, *supra* note 18, at 44 (computed as reported value of stock awards plus option awards, divided by reported total value of compensation).

³²² *Id.* at 38, 48 tbl. n.2.

³²³ J&J 2015 Proxy Statement, *supra* note 16, at 42.

³²⁴ *Id.* at 47.

Johnson & Johnson	
Annual cash incentives (continued)	<p>set as a percentage of salary.³²⁵</p> <p>Single-year performance measures (with a range goal for each) were</p> <ul style="list-style-type: none"> • Operational sales growth (“sales increase due to volume and price, excluding the effect of currency translation”) • Free cash flow (“net cash from operating activities less additions to property, plant, and equipment”) • Adjusted operational earnings per share growth (which excludes the effect of currency translation)³²⁶ <p>The proxy suggests that other objectives also play a role—e.g., innovation (as shown, for example, by successful product introductions and spending 11% of revenue on research and development); execution (as shown by strategic divestitures and exceeding revenue and cost synergies goals at a newly acquired business);</p>

³²⁵ *Id.* at 41.

³²⁶ *Id.* at 32–33. Adjusted earnings per share also excludes “special items as set forth in Exhibit 99.20 to [J&J’s] . . . Form 8-K dated January 20, 2015.” *Id.* at 33. That 8-K states:

The Company provides earnings before provision for taxes on income, net earnings, net earnings per share (diluted), and effective tax rate on an adjusted basis because management believes that these measures provide useful information to investors. Among other things, these measures may assist investors in evaluating the Company’s results of operations period over period. In various periods, these measures may exclude such items as significant costs associated with acquisitions, restructuring, litigation, and changes in applicable laws and regulations (including significant accounting or tax matters). Special items may be highly variable, difficult to predict, and of a size that sometimes has substantial impact on the Company’s reported results of operations for a period. Management uses these measures internally for planning, forecasting and evaluating the performances of the Company’s businesses, including allocating resources and evaluating results relative to employee performance compensation targets.

J&J, Current Report (Form 8-K) Exh. 99.20 n.A to tables (Jan. 20, 2015).

Johnson & Johnson	
Annual cash incentives (continued)	<p>and global reach (as shown, for example, by sales growth in both developed and emerging markets).³²⁷</p> <p>Proxy does not disclose how the company weighted these various factors in determining the multiplier.</p> <p>No individual bonus to be paid unless consolidated net earnings are positive, and no individual bonus to exceed .08% of such earnings.³²⁸</p>
Performance shares & metrics	<p>Committee and board set target compensation and pay mix,³²⁹ which then sets a target number of performance shares units³³⁰ that vest over a three-year performance period.³³¹</p> <p>The number of shares awarded depends on three metrics:</p> <ol style="list-style-type: none"> 1. 1-year operational sales for each year of the three-year period 2. Three-year cumulative adjusted operational EPS 3. Three-year TSR versus the three-year TSR of a composite competitor group,³³² which consists of 32 companies³³³ <p>Each factor separately determines how one-third of the PSUs translate into number of shares earned (with each single year of operational sales determining 1/3 of the 1/3 allocated to that factor),³³⁴ with no shares earned if the company does not meet the threshold for the factor, 50% earned if the company meets the threshold, 100% earned if the company achieves the target, and 200% earned if the company achieves the</p>

³²⁷ J&J 2015 Proxy Statement, *supra* note 16, at 32–33.

³²⁸ *Id.* at 41.

³²⁹ *Id.* at 46.

³³⁰ *Id.* at 55.

³³¹ *Id.* at 42, 51.

³³² *Id.* at 42. Both “operational sales” and “adjusted operational eps” are non-GAAP measures that apparently exclude the effects of currency fluctuations. *Id.* at 33.

³³³ *Id.* at 45 (excluding from the count the duplicate listings for GlaxoSmithKline plc and Merck & Co., Inc.).

³³⁴ *Id.* at 51.

Johnson & Johnson	
Performance shares & metrics (continued)	maximum goal (with straight-line scaling between the threshold and target and the target and maximum). ³³⁵ Executive is always in three vesting cycles.
Restricted stock	All RSUs for any given award vest at the end of a three-year vesting period. ³³⁶ Executive is always in three vesting cycles.
Compensation in equity	55% ³³⁷

JP Morgan Chase & Co.	
Options	No options were awarded to CEO for 2014 or 2013 ³³⁸ but were awarded in prior years. ³³⁹ No options were awarded to any of the NEOs in 2014. ³⁴⁰ Options granted to CEO in 2010–12 and to other NEOs in 2013 vested over a five-year period, in five equal installments. ³⁴¹ Exercise period cannot exceed 10 years after grant. ³⁴²
Annual cash incentives	While the company paid incentive cash and RSUs to the CEO in 2014, all of that compensation was determined in the following manner: Compensation & Management Development Committee

³³⁵ *Id.* at 52–53.

³³⁶ *Id.* at 43.

³³⁷ *Id.* at 54 (computed as reported value of stock awards plus option awards, divided by reported total value of compensation).

³³⁸ JPM 2015 Proxy Statement, *supra* note 20, at 58.

³³⁹ *Id.* at 60.

³⁴⁰ *Id.* at 60–61.

³⁴¹ *Id.* at 60–61 and tbl. n.1c.

³⁴² *Id.* at 80 (summary of amended plan), 112 (¶ 7(c) of JPM Long-Term Incentive Plan, as amended and restated effective May 19, 2015)). The 10-year limitation is not among the changes listed on page 75, indicating that the limitation was in the plan when it was last approved by the shareholders in 2011.

JP Morgan Chase & Co.	
Annual cash incentives (continued)	<p>(“CMDC”) set the CEO variable compensation and how it would be divided between cash and equity.³⁴³ In doing so, the CMDC did not use a formula³⁴⁴ but considered</p> <ul style="list-style-type: none"> • Performance • Value of the position to the organization and shareholders over time • Setting an example for others by doing “what’s right” and strengthening company culture • Market data • Internal pay equity among the Operating Committee members³⁴⁵ <p>Performance was evaluated in four broad categories:</p> <ol style="list-style-type: none"> 1. Business and financial results (e.g., net income, increase in tangible book value, return on tangible common equity, increase in Basel III Tier 1 capital ratio) 2. Risk and control outcomes (e.g., increase in spending on regulatory and control issues) 3. Client and customer goals (e.g., investment banking operation “participated in nine of the top ten fee-paying transactions”), and 4. People management and leadership objectives (e.g., work with board and CMDC on succession planning)³⁴⁶ <p>over an unspecified multi-year period³⁴⁷ with the assessment not formulaic³⁴⁸ but “holistic,”³⁴⁹ “balanced,”³⁵⁰ “disciplined,”³⁵¹ and “rigorous.”³⁵²</p>

³⁴³ *Id.* at 50.

³⁴⁴ *Id.* at 39.

³⁴⁵ *Id.* at 38–39.

³⁴⁶ *Id.* at 38, 42 (taking examples from report of CEO’s 2014 performance).

³⁴⁷ *Id.* at 38.

³⁴⁸ *Id.* at 39.

³⁴⁹ *Id.* at 38–39.

³⁵⁰ *Id.*

³⁵¹ *Id.*

³⁵² *Id.*

JP Morgan Chase & Co.	
Annual cash incentives (continued)	The CMDC had complete discretion to apply business judgment in deciding appropriate compensation. ³⁵³
Performance shares & metrics	No performance shares granted.
Restricted stock	<p>Amount paid in RSUs determined as set out in the annual bonus column.</p> <p>RSUs vest over three years, with one half vesting after year two and one half after year three.³⁵⁴</p> <p>But the vesting is subject to conditions, including a minimum 15% cumulative return on tangible common equity,³⁵⁵ which “measures the Firm’s earnings as a percentage of average [tangible common equity],” which is “the Firm’s common stockholders’ equity (i.e., total stockholders’ equity less preferred stock) less goodwill and identifiable intangible assets (other than [mortgage servicing rights]), net of related deferred tax liabilities.”³⁵⁶</p> <p>Thus, assuming an award every year, an executive is always in three vesting cycles after two years of awards.</p>
Compensation in equity	55.5% ³⁵⁷

³⁵³ *Id.* at 39.

³⁵⁴ *Id.* at 50.

³⁵⁵ *Id.*

³⁵⁶ *Id.* at 109.

³⁵⁷ *Id.* at 44, 49 (computed as stated value of RSUs divided by stated value of total compensation). The table uses the figures on pages 44 and 49 instead of computing the percentage from the summary compensation table because the equity figures in the summary compensation table included some 2013 compensation due to the timing of awards. *Id.* at 58 n.5 to tbl.1.