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Beyond Economics in Pay for Performance

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BEYOND ECONOMICS IN PAY FOR PERFORMANCE

*Tamara C. Belinfanti**

Abstract

This Article argues that while much of the intellectual energy has focused on the economics of executive pay, the challenge of executive compensation is as much a challenge of human behavior as it is one of economics. The raison d'être of pay for performance ("PFP") is to motivate executives to make decisions that are in the best interest of their firm and its shareholders. Attention to the relevant individual, situational, cultural, and institutional dynamics (what I term behavioral dynamics) that affect how executives are motivated and how they value future rewards is critical for the sustainability of PFP as a model of compensation design.

Drawing on salient research in the cognitive science and decision-making literature, the Article invites consideration on how relevant behavioral dynamics could affect our assessment of PFP as a motivational tool. The Article concludes by suggesting five potential ways to incorporate behavioral dynamics into compensation policy and design.

* Associate Professor of Law, New York Law School; J.D. Harvard Law School, 2000. I would like to thank Professor Lynn Stout for the conversation that inspired this piece two years ago. Special thanks to my colleagues at New York Law School for their helpful comments and insights, in particular, Elizabeth Chambliss, Steven Ellmann, Kris Franklin, Dan Hunter, Gerald Korngold, Frank Munger, David Schoenbrod, and Bill Wang. I am also deeply grateful to my research assistants, Lauren Luptak and Eberle Schultz, for their insights and help. All errors, of course, are mine.

I.	INTRODUCTION	93
II.	EXECUTIVE COMPENSATION AND PFP	100
	A. <i>Executive Compensation</i>	100
	1. Typical Executive Compensation Process and Package	100
	2. The Normative Rise of PFP and the Limits of a Financial Theory Approach	103
	3. The Advantages and Limitations of an Economic Conception of PFP	106
III.	INSIGHTS FROM BEHAVIORAL LITERATURE THAT IMPACT THE PFP MODEL	109
	A. <i>The Optimal Length of Contracts</i>	110
	1. Hyperbolic Discounting	111
	2. The Variability of Discount Rate	113
	B. <i>The Optimal Compensation Mix</i>	117
	1. Prospect Theory	117
	2. Sequencing Effect	119
	C. <i>The Gaming of Peer Groups and the Abuse of Medians</i>	121
	1. The Herding Effect	123
	2. Anchoring and Adjustment	126
	D. <i>The Danger of Ex Ante Financial Metrics</i>	127
	1. Optimism Bias	128
	2. Outcome Bias	130
	3. Crowding Out	132
IV.	BEYOND AN ECONOMIC CONCEPTION OF PFP— LEVERAGING BEHAVIORAL DYNAMICS	137
	A. <i>The Compensation Model—Accounting for Behavioral Dynamics</i>	139
	1. Shift from Shareholder Perspective Model to Manager Perspective Model	139
	2. Modeling for Behavioral Dynamics	140
	3. Expanded Definition of “Performance”	140
	B. <i>The Twin Pillars of Shaming and Reputation</i>	142
	C. <i>The Role of Diversity</i>	144
	D. <i>Countering Problems of Inter-Temporal Discounting and Motivation with Endowment and Framing</i>	147
	1. Endowment Effect	148
	2. Framing	149
	E. <i>Strategic Use of Perquisites and Non-Monetary Rewards</i>	150
V.	CONCLUSION	152

*Our view is that it is important to consider behavioral responses. Any proposals for changes in the design of compensation contracts should consider how executives alter their behavior as a result of the changes.*¹

I. INTRODUCTION

Why do football coaches overwhelmingly favor punting on fourth down even though they have at least another chance to move the ball forward or, better yet, score a touchdown? Before answering this question, consider that the decision to always punt on fourth down is not a rational one in most cases, yet coaches continue to rely on the punt even in situations where there are other options that statistically increase their probability of winning.²

There is a copious body of literature on sports decision-making that has struggled with this question and which suggests that possible reasons for this seemingly irrational behavior include various factors such as hidden prejudices, behavioral biases, the human tendency to “play it safe” rather than go for a potentially large return, the fear of retribution, and the fact that coaches may be risk averse.³

Like football coaches who are charged with making specific strategic choices that affect the probability of their team winning and making a profit, top executives of public corporations are charged with making specific strategic decisions that affect their company’s long-term growth and profit. These executives’ compensation packages are supposed to be designed in a way that incentivizes them to do just that, yet, like their football coach counterparts, these executives are subject to behavioral factors that affect whether a given compensation package actually incentivizes them to make decisions beneficial to their firm and its shareholders. Understanding what these factors might be is critical to understanding how to design compensation packages that truly do incentivize executives to consistently make long-term value-enhancing decisions.

This Article argues that while much of the intellectual energy has focused on the *economics* of executive pay, the challenge of executive compensation is as much a challenge of *human behavior* as it is one of economics. The *raison d’être* of pay for performance (“PFP”) is to motivate executives to make decisions that are in the best interest of their

1. Michael Faulkender et al., *Executive Compensation: An Overview of Research on Corporate Practices and Proposed Reforms*, J. APPLIED CORP. FIN., Winter 2010, at 107, 113.

2. See, e.g., Adam Himmelsbach, *Punting Less Can Be Rewarding, but Coaches Aren’t Risking Jobs on It*, N.Y. TIMES, Aug. 19, 2012, at SP9.

3. *Id.*

firm and shareholders.⁴ An appreciation for salient behavioral factors that affect how people are motivated and how they value future rewards is critical for the sustainability of PFP as a model of compensation design. These behavioral factors include various individual, situational, cultural and institutional dynamics (what I term “behavioral dynamics”) that shape and dictate the ideal compensation package for a given executive at a given firm.

The dominant normative claim in compensation design is that the way to incentivize executives to make long-term value-enhancing decisions is to tie PFP by linking a substantial portion of that executive’s pay to his or her firm’s economic performance.⁵ However, numerous stories such as the 2008 UBS tax evasion, the 2001–2002 collapses of Enron and WorldCom, and the 2008 implosion of Lehman Brothers where executives made decisions which were antithetical to the long-term interests of their companies, have called into question whether the promise of mere economic reward actually incentivizes an executive to achieve greater long-term value for his or her firm.⁶ Policy-makers and academics have attempted to address this question by tinkering with the economic structure of the relationship between the executive’s pay and his or her firm’s performance, and by refining the operating metrics against which performance is measured. However, after almost two decades of tinkering with the economics of the relationship between pay and performance, it is unclear that simply tying pay to financial performance is enough to truly incentivize executives to make these value-enhancing decisions.

While the economic aspects of executive compensation no doubt play a part, there is a vast body of behavioral literature that suggests that behavioral dynamics do as well. In a 1991 study of how executives’ actions affect their valuation of their compensation, the researchers’ empirical findings reflected this intuition.⁷ The study concluded that

4. See LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* 19 (2004) (describing the PFP model).

5. See *id.*; Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 323 (1976); Michael C. Jensen & Kevin J. Murphy, *CEO Incentives—It’s Not How Much You Pay, but How*, HARV. BUS. REV., May–June 1990, at 138, 139.

6. See Lynnley Browning, *Ex-UBS Banker Pleads Guilty in Tax Evasion*, N.Y. TIMES, June 20, 2008, at C1; Susanne Craig et al., *AIG, Lehman Shock Hits World Markets*, WALL ST. J., Sept. 16, 2008, at A1; Simon Romero & Riva D. Atlas, *WorldCom Files for Bankruptcy; Largest U.S. Case*, N.Y. TIMES, July 22, 2002, at A1; Rebecca Smith, *Enron Files for Chapter 11 Bankruptcy, Sues Dynegy*, WALL ST. J., Dec. 3, 2001, at A3.

7. See generally Richard A. Lambert et al., *Portfolio Considerations in Valuing Executive Compensation*, 29 J. ACCT. RES. 129 (1991) (providing “a framework for valuing a compensation contract from the perspective of a manager”).

executive compensation “valuation formulas that ignore [individual and behavioral] parameters in calculating executive compensation . . . create[] a measurement error problem that can generate misleading inferences.”⁸

Viewing executive compensation through a behavioral dynamics lens shifts the focus away from the economic aspects of compensation design to the human aspects that could affect the choice and efficacy of a given compensation design. In doing so this Article makes at least two contributions to the executive compensation literature and discourse. First, it augments the current body of corporate law literature, by considering behavioral research on decision-making under uncertainty and intrinsic motivation as a dynamic whole.⁹ Second, it proposes five ways to effectively use behavioral dynamics to enhance the efficacy of the PFP framework.

Part II.A of this Article provides an overview of the dynamic nature of the executive compensation landscape and describes the general features of a typical executive compensation package. Additionally, Part II.A discusses the rise of the PFP and the optimal contracting view and managerial power approach, which both define how the PFP model has developed and is currently used.¹⁰ The optimal contracting school views executive compensation as a reflection of an arms-length bargaining process in which executives are rewarded for enhancing shareholder value.¹¹ The managerial power approach views executive compensation as a reflection of a process whereby CEOs exert enormous influence over the board to “extract rents” and receive handsome windfalls.¹² Thus, the optimal contract model is perhaps more aspirational, while the managerial power approach exhibits tempered realism. Both approaches, however, espouse a relatively static and economic conception of human behavior, and, as such, the current PFP model is expressly economic in both intent and design. Part II.A acknowledges the benefits to this approach, primarily that it easily lends itself to algorithmic and mathematical succinctness, and discusses several of its drawbacks. For example, PFP is more concerned with motivating a firm’s CEO and other top executives to act in the long-term best interest of the firm and its shareholders, and less concerned with the recruitment and retention functions of compensation.

8. *Id.* at 145.

9. See, e.g., Iman Anabtawi, *Explaining Pay Without Performance: The Tournament Alternative*, 54 EMORY L.J. 1557, 1562, 1596 (2005).

10. See BEBCHUK & FRIED, *supra* note 4, at 19; Jensen & Meckling, *supra* note 5, at 323.

11. See BEBCHUK & FRIED, *supra* note 4, at 19.

12. See *id.*

Part III applies behavioral science learning to explore four issues that generate concern in executive compensation and which are often primarily analyzed through a financial or economic lens. The four issues examined in Part III concern: (1) the optimal length of an executive compensation contract, (2) the optimum “compensation mix,” (3) perceived abuses by companies and boards in their selection of peer groups and their use of median compensation figures, and (4) the use of *ex ante* financial metrics. Behavioral theories discussed in Part III include (1) findings on inter-temporal decision making, (2) findings on decision-making under uncertainty, (3) findings on how humans judge the quality of a decision, and (4) and findings on the relationship between rewards and intrinsic motivation. My objective in Part III is to show how an application of a behavioral science perspective to concerns that have been examined predominantly through a purely economic lens helps unlock certain insights. One overarching insight that emerges in the process of viewing executive compensation design through a behavioral frame is that a PFP model that focuses solely on the economic aspects of how to incentivize executives, may (1) simultaneously under-incentivize executives to achieve long-term growth (due to factors such as hyperbolic discounting discussed in Part III.A) while (2) over-incentivizing executives to exhibit behavior that erodes intrinsic motivations to act in a selfless way towards the corporation (so-called “crowding out” phenomenon, which is discussed in Part III.D).

To elaborate, behavioral studies on inter-temporal decision-making—i.e., how people make decisions across different time frames—shed light on some of the behavioral dynamics that impact one’s decision-making process when one is asked to make a decision about some occurrence in the future. For example, one’s preference for tickets to the Final Four of the NCAA Basketball Tournament may change depending on whether the tickets offered are for next week’s Final Four, next year’s Final Four, or the Final Four in 2017. Since executive compensation contracts are typically designed to span a range of time frames (for example, salaries are paid monthly, bonuses are paid annually, and other payments will be earned at some point after one year), understanding how individuals evaluate rewards over a series of time frames is essential to assessing the efficacy of the current PFP model. Of particular interest to this investigation are the behavioral science findings of hyperbolic discounting, variable discount rates, diminishing marginal utility in the context of hyperbolic discounting, optimism bias, and the sequencing effect, which individually and collectively suggest that simply promising executives large rewards at some point in the future may not actually motivate them to take the

desired course of action.¹³ As developed in Part III, if rewards occur at a point too distant in the future, or if the sum total of the rewards do not represent an improvement over time and/or if diminishing marginal utility has occurred, then the executive will not attach as much value to these rewards, hence he or she will not be optimally incentivized to achieve these rewards.

Second, theories on how people determine value in the face of unknown variables (i.e., make decisions under uncertainty) augment our understanding of how people make decisions across time frames. Even assuming time is not a factor in decision-making, these studies focus on how people process information and determine value in the face of unknown variables. In particular, behavioral findings on “herding” and “anchoring and adjustment” are considered. “Herding” refers to the tendency of individuals to mimic the actions (both rational and irrational) of a large group—the more people undertake an action the more likely it is that others exposed to the action will follow suit.¹⁴ “Anchoring and adjustment” refers to the tendency to determine value by making short-cut estimates based on an initial value that is then adjusted to yield the final value, even though that initial value may be based on an error in judgment.¹⁵ Part III considers whether the widespread adoption of PFP in executive compensation contracts, and the similarity in how PFP design is described in firms’ annual proxy statements, are a reflection of market rationality and optimal contracting, or whether they represent a “false positive” as a result of irrational herding and/or anchoring and adjustment.

Third, are behavioral findings on how people judge the quality of a given decision by looking at the resulting outcome rather than the quality of the decision process (the so-called “outcome effect” or “outcome bias”).¹⁶ Part III considers whether the reliance on outward metrics in the PFP model actually results in suboptimal behavior because the model focuses solely on output and does not reward input. This in turn could encourage executives to engage in questionable behavior (such as manipulating earnings) solely to satisfy the desire to achieve the stated outcome.¹⁷

Fourth, are behavioral theories on the relationship between promised reward and intrinsic motivation. In this regard, behavioral

13. See *infra* Part III.

14. See *infra* Part III.

15. See *infra* Part III.

16. For a discussion of outcome bias, see Jonathan Baron & John C. Hershey, *Outcome Bias in Decision Evaluation*, 54 J. PERSONALITY & SOC. PSYCHOL. 569, 570-71, 578 (1988).

17. See Faulkender et al., *supra* note 1, at 109.

findings on “crowding out” are discussed. “Crowding out” refers to the phenomenon where paying a monetary reward to motivate an individual to undertake some socially beneficial act may actually lead to the opposite result because it “crowds out” that individual’s *intrinsic* motivation to behave “prosocially.”¹⁸ As discussed in Part III, the “crowding out” phenomenon has been observed and documented in several other areas, including land use regulation and environmental policy. “Crowding out” presents serious complications in executive compensation design, where the dominant consensus is that the way to rein in excessive executive compensation is to offer financial incentives that are tied to pre-defined metrics. The phenomenon of “crowding out” means that we may be unintentionally cultivating and/or encouraging a culture where executives are focused solely on meeting some pre-defined metric, and are less concerned with undertaking prosocial behaviors since PFP and the market may not reward them for these. Furthermore, in today’s world where at least some segment of investors is becoming more focused on corporate social responsibility issues long-term value creation, “impact investing”¹⁹ and “creating shared value” initiatives,²⁰ engendering a culture that “crowds out” may be the exact opposite of the direction in which we should be moving.

Part IV draws on the behavioral insights gleaned from Part III and explores ways to improve upon the PFP model to better achieve its stated goal of motivating executives to make decisions that are in the best interests of the firm and its shareholders. Rather than focusing on the economic nature of executive compensation, the solutions espoused in Part IV leave room for continued refinement of economic aspects of compensation, and instead focus on ways to reduce the dissonance between the PFP prescription and the realities of human decision-making and motivation.

In particular, Part IV explores two categories of solutions: first are solutions that focus on the compensation model itself, and second are solutions that focus on using behavioral insights to cultivate an environment that supports PFP’s normative goal of motivating

18. See LYNN STOUT, *CULTIVATING CONSCIENCE: HOW GOOD LAWS MAKE GOOD PEOPLE* 191-92 (2011).

19. Impact investing refers to investments made based not only on the financial return of the investment, but also the social and environmental impact of that investment. *E.g.*, Paul Sullivan, *With Impact Investing, A Focus on More Than Returns*, N.Y. TIMES (Apr. 23, 2010), <http://www.nytimes.com/2010/04/24/your-money/24wealth.html>.

20. Shared value investing “recognizes that societal needs . . . define markets. It also recognizes that societal harms or weaknesses frequently create *internal* costs for firms . . . Shared value, then, is . . . about expanding the total pool of economic and social value.” Michael E. Porter & Mark R. Kramer, *Creating Shared Value*, HARV. BUS. REV., Jan.–Feb. 2011, at 62, 65.

executives to act in the best interests of others. With respect to the first category of solutions, Part IV explores how behavioral dynamics could be built into valuation models for a compensation contract. Part IV also explores how building in non-financial measures of “performance” into the model could lessen the presence of the “crowding out” effect. With respect to the second category of solutions, Part IV considers the role of reputation and shaming as motivational tools; the role of diversity in overcoming the optimism effect and the anchoring and adjustment effects; the use of *ex post* and non-monetary rewards such as plaques, trophies, and public awards, as a way to incentivize without “crowding out” other intrinsic values; and the use of “framing” techniques to influence behavior. In addition, Part IV considers current features of executive compensation design that should be encouraged from a behavioral dynamics perspective. These include the use of “claw backs,”²¹ restricted stock options, and escrow accounts, which may actually incentivize executives to act in the desired way—a result due to the “endowment effect,” which recognizes that people generally have a harder time giving up something once they have earned it.

To be clear, although PFP has several limitations which I discuss in Part IV.A.3, I am not advocating that the PFP model be discarded wholesale, because I do believe that PFP can provide a useful analytical framework for determining and assessing compensation design. What I am advocating, however, is that in order to achieve its stated goal of incentivizing executives to behave in a manner that leads to greater efficiency and economic performance, the PFP model must be willing to take into account behavioral insights that affect how executives actually behave in response to the offered compensation.

As mentioned before and as developed in greater detail in this Article, a purely economic conception of what it means to “incentivize” will either fail to truly incentivize, or over-incentivize executives and suppress certain intrinsic motivations which we should want to encourage from a PFP perspective. Pursuing a PFP model without accounting for behavioral dynamics is akin to shooting darts in the dark.

21. See Sarbanes-Oxley Act of 2002, 15 U.S.C. § 7243 (2006) (providing for the forfeiture of “bonus[es] or other incentive-based or equity-based compensation” by CEOs and CFOs during the first twelve-month period after the first public issuance or filing of a financial document detailing the reporting requirement to which the issuer was not compliant as a result of misconduct); Dodd-Frank Wall Street Reform and Consumer Protection Act, 15 U.S.C. § 78j-4 (Supp. IV 2011) (discussing the recovery of certain bonuses and profits from executives); see also *infra* Part III.D.1 (discussing clawbacks).

II. EXECUTIVE COMPENSATION AND PFP

A. *Executive Compensation*

1. Typical Executive Compensation Process and Package

In a public corporation, the compensation committee of the board of directors typically determines executive compensation. Compensation committees often use outside compensation consultants to assist them in evaluating and developing appropriate executive compensation policies and practices, and in determining specific compensation packages for individual executives. The listing standards of the New York Stock Exchange (“NYSE”) and the NASDAQ Stock Market (“NASDAQ”) require that the compensation committee be composed solely of “independent” directors. This requirement is meant to ensure that executive compensation decisions are made on an arms-length, conflict-free basis, resulting in a compensation package that is in the best interest of the corporation’s shareholders.²²

In designing an executive compensation package, the compensation committee must take into account various factors, such as: the interest of the executive whose compensation they are charged with determining; the interest of the corporation; the corporation’s shareholders; proxy advisor policies and their stance on certain features of executive compensation packages; minimizing the chances of litigation based on their defined executive compensation; the compensation packages of peer firms and firms within their industry; movement in the stock market; potential changes in law; potential changes in power during an election year; and the broader economy.²³ In addition, the compensation committee must ensure compliance with an inter-tangled framework of both state and federal laws, stock exchange listing requirements, and

22. NEW YORK STOCK EXCH., LISTED COMPANY MANUAL § 303A.05(a) (2013); NASDAQ STOCK MKT., NASDAQ MANUAL § 5605(d)(2) (2013).

23. *See, e.g.*, MERIDIAN COMPENSATION PARTNERS, LLC, 2012 TRENDS AND DEVELOPMENTS IN EXECUTIVE COMPENSATION 12 (Apr. 2012) [hereinafter MERIDIAN, 2012 TRENDS], available at http://www.meridiancp.com/images/uploads/2012_Trends_and_Developments_in_Executive_Compensation_Survey_Results.pdf.

accounting standards.²⁴ The task of designing an appropriate compensation package is thus complicated and dynamic.

Nevertheless, in spite of this dynamism, the typical executive compensation package is quite uniform across firms of varying sizes and industries.²⁵ The typical executive compensation package consists of:

- Base salary
- Performance based annual incentive (bonus)
- Performance based long term incentive
- Benefits
- Executive Perquisites
- Contingent Payments.²⁶

The base salary is typically stated as an annual salary, and generally does not exceed one million dollars because of tax implications (which are discussed below). The annual incentive is comprised of the annual bonus, which is usually paid in cash and can often amount to twice the executive's annual salary.²⁷ Most annual bonuses include a two-tiered structure with a "target" level which is the executive's normal expected performance, and a "stretch" component, which is only earned if the corporation achieves above-ordinary results. The purpose of the annual incentive "is to compensate executives for achieving the company's short-term business strateg[ies]."²⁸

24. See David J. Walker, *The Law and Economics of Executive Compensation: Theory and Evidence*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CORPORATE LAW 233 (Claire A. Hill & Brett H. McDonnell eds., 2012). In terms of federal law, the Dodd-Frank Wall Street Reform and Consumer Protection Act contains several provisions related to executive compensation, including requirements that public company shareholders be given a non-binding vote on executive pay (so-called "say on pay"). See Dodd-Frank Wall Street Reform and Consumer Protection Act, 15 U.S.C. § 78n-1. Similarly, the Troubled Assets Relief Program restricts companies that received federal bailout money in the types and amount of compensation they can pay their executives. Emergency Economic Stabilization Act of 2008, 12 U.S.C. § 5221 (Supp. IV 2011). The Sarbanes-Oxley Act of 2002, various SEC rules and regulations, and various tax regulations, are the main laws which govern and/or impact both the procedural and substantive aspects of executive compensation. Walker, *supra*, at 233. Under state law, the appropriateness of an executive's compensation package is typically judged under a "waste standard," which requires that a compensation decision be upheld unless the plaintiff can show that the compensation was both irrational and amounted to a disproportionate exchange. See, e.g., *In re Walt Disney Co. Derivative Litig.*, 906 A.2d 27, 73-75 (Del. 2006).

25. See Walker, *supra* note 24, at 236-37.

26. *The Basics of Executive Pay Packages*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_packages.aspx (last visited Feb. 7, 2013) [hereinafter *Basics*].

27. *Annual Incentive*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_bonus.aspx (last visited Feb. 7, 2013).

28. *Id.*

Performance-based long-term incentives, which include:

- compensation in the form of stock
- stock options
- restricted stock
- performance-vested stock, options, or similar devices

are by far the largest component of executive pay.²⁹ As the name suggests, the stated purpose of long-term incentives “is to reward executives for achieving the company’s [long-term] strategic objectives that . . . maximize shareholder value.”³⁰ The performance period for measuring achievement of a long-term objective is usually three to five years.³¹ The executive typically does not receive any pay from the incentive until the end of the performance period and the amount of remuneration received is based on achievement of the predefined metric. Typically, performance-based long-term incentives like annual incentives also include target and stretch components to encourage executives to achieve superior results.³²

Contingent payments are comprised of payments due to the executive in the event of severance or a change in control. Severance agreements provide for payments to executives in the event of a voluntary or involuntary termination. Change-in-control agreements, which are also known as “golden parachutes,” are meant to compensate executives for job loss due to a merger or sale.³³

Typically, executives also receive benefits like those offered to salaried employees, including “statutory benefits such as Social Security, Medicare, Workers Compensation, and Unemployment Insurance,” along with several company benefits such as vacation, maternity and paternity leave, sick days, life insurance, and medical insurance.³⁴ Unlike salaried employees, however, “executives are often eligible to participate in special retirement plans,” such as nonqualified deferred compensation plans and supplemental employee retirement plans.³⁵

Finally, “perquisites or ‘perks’ constitute additional compensation for senior executives which are not available to other salaried

29. *Long-Term Incentive*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_lti.aspx (last visited Feb. 7, 2013).

30. *Id.*

31. *Id.*

32. *Id.*

33. *Conditional Payments: Severance and Change-in-Control Agreements*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_bonus.aspx (last visited Feb. 7, 2013).

34. *Benefits*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_benefits.aspx (last visited Feb. 7, 2013).

35. *Id.*

employees,” such as convenient parking, use of the company jet, and relocation expenditures.³⁶ While perks provide a favorite target for the media as examples of compensation excesses,³⁷ executive perks typically constitute a relatively small percentage of executive pay, usually ranging from one to five percent.³⁸

2. The Normative Rise of PFP and the Limits of a Financial Theory Approach

The rise of PFP as an ideology can be traced back to a 1990 article in the *Harvard Business Review* by economists Michael Jensen and Kevin Murphy which called for companies to tie their executives’ pay to objective benchmarks.³⁹ A few years later in 1993, the federal tax laws were amended to incentivize corporations to achieve this result.⁴⁰ The amended tax provisions provide that corporations cannot deduct as a business expense compensation paid to an executive in excess of one million dollars, unless, *inter alia*, the compensation is linked to an objective metric of corporate performance.⁴¹ The 1993 amendment caused a major shift in compensation practices. Prior to 1993, corporations mostly compensated executives with fixed salaries and discretionary bonuses.⁴² Following the change in the tax code, companies began to limit the salary portion to one million dollars, but increased the incentive pay.⁴³ Interestingly, immediately after the tax amendments went into effect, the percentage of CEO compensation attributable to incentive pay was only thirty-five percent.⁴⁴ Today, this figure is estimated to be close to eighty-five percent.⁴⁵

The 1993 tax amendments provided a tepid response to the growing concerns that executives were extracting more than their fair share from the firms that employed them. In 2001, these concerns of corporate greed

36. *Executive Perquisites*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_perqs.aspx (last visited Feb. 7, 2013).

37. See, e.g., Joann S. Lublin, *Shareholders Hit the Roof over Relocation Subsidies*, WALL ST. J., Oct 25, 2010, at B1 (describing how activist investors are “turning up the heat on companies that give relocating executives generous benefits to cover the cost of their depressed home values”).

38. See *Executive Perquisites*, *supra* note 36.

39. See Jensen & Murphy, *supra* note 5, at 139-40.

40. See I.R.C. § 162(m) (2006); *Base Salary*, CENTER ON EXECUTIVE COMPENSATION, http://www.execcomp.org/basics/basics_base.aspx (last visited Feb. 7, 2013).

41. See I.R.C. § 162(m).

42. Tod Perry & Marc Zenner, *CEO Compensation in the 1990s: Shareholder Alignment or Shareholder Expropriation?*, 35 WAKE FOREST L. REV. 123, 147 tbl.2 (2000).

43. *Base Salary*, *supra* note 40; see Perry & Zenner, *supra* note 42, at 147 tbl.2.

44. See Perry & Zenner, *supra* note 42, at 147 tbl.2 (reporting that in 1993 bonus compensation accounted for 20.07% and options compensation accounted for 14.99%, totaling 35% in incentive pay).

45. *Basics*, *supra* note 26.

and deceit were brought into sharp focus with the public collapses of Enron, WorldCom, and Global Crossing. Academic and policy discourse on executive compensation significantly increased, and the concept of PFP which had been floated since the early 1980s was revisited with new vigor.

In 2002, Professors Bebchuk, Fried, and Walker put forth a managerial power theory of executive compensation,⁴⁶ which has since become the dominant conception of executive compensation and PFP. They argued that even though incentive pay structures had been adopted, executive compensation contracts reflected rent extraction rather than optimal contracting.⁴⁷ They further argued that the evidence revealed that executive compensation contracts were not being designed to minimize agency costs (the optimal contracting view), but rather they were the result of rent extraction.⁴⁸ Meanwhile, Bebchuk et al. contended that the evidence suggested that there was no arm's length bargaining; no market constraints to induce players to adopt optimal compensation contracts; and that courts did not prove effective in correcting or guarding against these bloated compensation packages.⁴⁹

Their prescription was that pay should be *more closely* tied to performance and that care should be taken in compensation design to minimize, or where possible, eliminate payments that were merely gratuitous and had nothing to do with executive performance.⁵⁰ These included the elimination of non-indexed or non-benchmarked options (to avoid windfall from general rises in the market); the elimination of at-the-money options (options priced so that at the time of issuance they are in the money); the elimination of the practice of option-repricing and issuing reloadable options; and the preference for long-term incentives over short-term incentives.⁵¹

Many aspects of the managerial power approach have either been formally implemented into law or have become *de facto* law through their repeated use in executive compensation discourse and policy. For example, it is now common practice to index all options granted to executives to some predetermined metric. Similarly, compensation consultants often advise, and proxy advisors often insist, that companies tie a significant portion of an executive's pay to some predefined and yet

46. Lucian Arye Bebchuk et al., *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751, 784-85 (2002).

47. *Id.* at 793.

48. *See id.*

49. *Id.* at 774, 779.

50. *See id.* at 798.

51. *See* BEBCHUK & FRIED, *supra* note 4, at 164-67, 183-84; Bebchuk et al., *supra* note 46, at 798, 809-10, 819-20, 832-33.

to be realized metric.⁵² In terms of formal law, in 2006 the U.S. Securities and Exchange Commission (“SEC”) amended its rules to require additional disclosure of executive and director compensation.⁵³ The amendments refined the then-required tabular disclosure by requiring that this tabular disclosure be combined with improved narrative disclosure to be contained in a new Compensation Discussion and Analysis section (the “CD&A”)—the aim being, “to elicit clearer and more complete disclosure of compensation of the principal executive officer, principal financial officer, the three other highest paid executive officers and the directors.”⁵⁴ In addition, in 2009 and 2010, respectively, the NYSE and NASDAQ changed their listing standards and required that members of the board compensation committee be independent—a change which responded to Bebchuk et al.’s critique that there was no arm’s length bargaining between the board and top executives.⁵⁵

It was the 2008 financial crisis, however, that brought the executive compensation debate out of primarily academic and policy circles and into the public debate, and renewed the managerial power view that there was rampant corporate greed. If the 2001 corporate failures of Enron and WorldCom fanned the flame, the 2008 financial crisis ignited it. The debate over the appropriateness of executive compensation became part of the public discourse and was no longer confined to academic and policy circles. The so-called “Occupy Wall Street Movement” latched onto executive compensation as a mobilizing force and used it as an example of the widening disparity between the so-called “One Percent”

52. See, e.g., GARY HEWITT & CAROL BOWIE, INSTITUTIONAL S’HOLDER SERVS., INC., EVALUATING PAY FOR PERFORMANCE ALIGNMENT: ISS’ QUANTITATIVE AND QUALITATIVE APPROACH (describing the types of metrics and PFP structures that Institutional Shareholder Services, Inc. (“ISS”), one of the leading proxy advisors, will deem to reflect sound corporate governance, and which will in turn affect whether ISS recommends that shareholders vote in favor of a company’s compensation package); *Pay for Performance*, GLASS, LEWIS & CO., <http://www.glasslewis.com/downloads/policies/Pay-For-PerformanceDescription.pdf> (last visited Feb. 7, 2013) (“[C]ompensation practices should align management’s interests with those of shareholders. Thus, [we] believe that executive compensation should be closely tied to company and stock performance.”); see also *Pay-for-Performance Analytics*, EQUILAR, <http://www.equilar.com/governance-center/TSR-CEO-pay-modeler.php> (last visited Feb. 7, 2013) (“[I]t is imperative for companies and investors to understand, measure, and communicate the relationship between executive compensation and long-term shareholder value creation. . . . [C]ompanies need to accurately and consistently measure CEO compensation and company performance for both their company and all of their peers.”).

53. See Press Release, SEC, SEC Votes to Adopt Changes to Disclosure Requirements Concerning Executive Compensation and Related Matters (July 26, 2006) [hereinafter *Disclosure Requirements*], available at <http://www.sec.gov/news/press/2006/2006-123.htm>.

54. *Id.*

55. See N.Y. STOCK EXCH., LISTED COMPANY MANUAL § 303A.05 (2013); NASDAQ STOCK MKT., NASDAQ MANUAL § 5605(d)(2) (2013); Bebchuk et al., *supra* note 46, at 766, 774, 784-85; see also BEBCHUK & FRIED, *supra* note 4, at 24-25.

and “Ninety-Nine Percent.”⁵⁶ The Oval Office jumped into the fray with President Barack Obama repeatedly referring to Wall Street executives as “Wall Street fat cats”—alluding to the belief that executives were greedy and earning much more than was commensurate with their labor and effort.⁵⁷ Congress responded in 2010 by passing the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”),⁵⁸ which contains several provisions related to executive compensation, including requirements that public company shareholders be given a non-binding vote on executive pay (so-called “say on pay”).⁵⁹ Finally, Dodd-Frank contains an additional set of executive compensation disclosure requirements, now known as the “Enhanced CD&A,” that require public corporations to disclose whether, and if so how their compensation policies take into account the result of any say on pay votes.⁶⁰

3. The Advantages and Limitations of an Economic Conception of PFP

The main advantage of the managerial power approach to executive compensation is that it provides a tractable theory that can be operationalized relatively easily. This is because the managerial power approach is solely focused on the *economics* of the relationship between how much an executive earns and how that executive’s firm performs. The second advantage is that the managerial power approach fits neatly within the traditional economic and financial perspectives that have long dominated corporate law. Thus its framing of, and prescription for, executive compensation as an economic one, received (at least initially) less push back from corporate law scholars, and the approach significantly influenced SEC rulemaking, the market and shareholders’

56. *The 99 Percent Project*, OCCUPY WALL STREET, <http://www.occupywallst.org/article/99Percent/> (last visited Feb. 7, 2013).

57. In a 2009 interview broadcast, President Barack Obama blasted banking executives for having paid themselves multi-million dollar bonuses after receiving federal bailout money and stated, “I did not run for office to be helping out a bunch of, you know, fat-cat bankers on Wall Street.” David Jackson, *Obama: ‘Fat Cat’ Bankers Owe Help to U.S. Taxpayers*, USA TODAY, Dec. 14, 2009, at 7A; see also Kevin Roose, *Bonuses Dip on Wall St., but Far Less Than Earnings*, N.Y. TIMES: DEALBOOK (Feb. 29, 2012, 8:48 AM), <http://dealbook.nytimes.com/2012/02/29/as-bank-profits-plunge-wall-street-bonuses-fall-modestly> (stating that “Wall Street continues to be a lightning rod for politicians and critics who contend that the industry’s pay packages are too high”).

58. Pub. L. No. 111-203, 124 Stat. 1376 (2010) (codified as amended in scattered sections of the U.S.C.).

59. 15 U.S.C. § 78n-1 (Supp. IV 2011).

60. *Id.*; see Scott Hirst, *SEC Issues Proposed Rules on Say-on-Pay Voting and Disclosures*, HARV. L. SCH. F. CORP. GOV. & FIN. REG. (Nov. 11, 2012, 9:56 AM), <http://blogs.law.harvard.edu/corpgov/2010/11/11/sec-issues-proposed-rules-on-say-on-pay-voting-and-disclosures>.

conception of executive compensation, and the design of executive compensation packages.

Despite the neat tractability of the managerial power approach to PFP, the fundamental question remains as to whether this purely economic approach to PFP either works and/or is sustainable. With respect to instances of pay being insensitive to performance, the managerial power response is to focus on the economic design of the PFP package. Consider, however, that despite having lived through almost two decades of tinkering with the economic design of PFP to achieve the right model to incentivize executives to act in the long term interest of the firm, and that currently over eighty-five percent of all public companies have implemented a PFP model, stories continue to abound of pay being decoupled from performance.⁶¹

It is time for us to consider whether the answer lies beyond the economics. For starters, a macro shift to a PFP model seems to have actually increased the ratio of CEO pay to that of the average American worker. In 1991, two years before the adoption of the tax amendments which caused the push towards PFP adoption, the average American CEO of a large public company received pay approximately 140 times that of the average employee; ten years after the tax amendments, the ratio was approximately 500 times; and today, after further tinkering and refinement of the PFP structure, that ratio is approximately 300 times.⁶² Consider further that Lehman Brothers, AIG, Countrywide, Enron, WorldCom, and Global Crossing all had PFP programs in place at the time of their respective demise. In addition, we now have more meaningful transparency and accountability as a result of the SEC's Enhanced CD&A rules and say on pay, yet concerns about whether our system of executive compensation actually motivates executives to act in the long term best interests of the corporation and its shareholders still remain.

The evidence on the ground indicates that in many ways pay remains insensitive to performance, even in the face of careful economic tinkering, transparency, and accountability. In addition, the flip side of pay insensitivity is that if one adopts a purely economic conception of "performance" then even though pay sensitivity increases, so could several of the greedy and reckless tendencies that PFP tries to discourage. A 2010 report prepared for a Morgan Stanley publication (the "Morgan Stanley report") highlighted this concern, stating that

61. See BEBCHUK & FRIED, *supra* note 4, at 121-22, 135-36; *Basics*, *supra* note 26.

62. See BEBCHUK & FRIED, *supra* note 4, at 1; Mike Spector & Tom McGinty, *The CEO Bankruptcy Bonus*, WALL ST. J., Jan. 27, 2012, at A1.

while “[p]ay-for-performance sensitivity has significantly increased over time, improving the alignment of CEOs with shareholders, . . . [PFP] also appears to have had unintended consequences,” including the manipulation of earnings, the externalization of risks, and the use of aggressive accounting practices to inflate a company’s stock price.⁶³

The 2008 financial crisis was a wakeup call that the current economic focus of PFP needs to be re-evaluated. In other sectors such as healthcare and education, the value of PFP is now being questioned.⁶⁴ Understandably, implementing performance-based pay in the education setting may lead to increased performance of students in the classroom, but may also lead to undesired effects such as teachers directing their efforts solely towards these monetary rewards and “teaching to the test.”⁶⁵ Similarly, a recent study on performance-based pay in the medical field found that problems arose due to the collaborative effort often needed to treat a patient effectively and achieve quality patient care.⁶⁶ And closer afield in the corporate world, there are the beginnings of empirical evidence offering good reason for skepticism about the promise of PFP in the executive compensation space. For example, a 2011 study concluded that their empirical findings challenge the “popular belief” that executive stock options can be used to incentivize risk averse CEOs to overcome their aversion and invest in risky projects, which do in fact generate positive net present values.⁶⁷

PFP as a sustainable and reliable model for executive compensation is at a crossroads—either continue to focus solely on the economics, which thus far has yielded questionable results, or expand its perspective to incorporate learning from other fields that directly speak to the concern of PFP—motivating executives to do good for the firm and its shareholders while being paid commensurately. To truly reach its goal of incentivizing executives to act in the long-term interests of the firm and its shareholders, the current PFP model must be willing to look beyond the confines of financial and economic theory and consider how people are actually motivated, and how they make judgments that require

63. See Faulkender et al., *supra* note 1, at 113-14, 117.

64. See, e.g., Julia James, *Pay-for-Performance*, HEALTH POL’Y BRIEF 3-4 (Dec. 20, 2012), available at http://www.healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_78.pdf; see also Victor Lavy, *Using Performance-Based Pay to Improve the Quality of Teachers*, 17 FUTURE OF CHILDREN 87, 88 (2007).

65. See, e.g., Stephenie Overman, *Fighting the Stress of Teaching to the Test*, NAT’L EDUC. ASS’N, <http://www.nea.org/tools/fighting-stress-teaching-to-Test.html> (last visited Feb. 7, 2013).

66. See James C. Robinson et al., *Quality-Based Payment for Medical Groups and Individual Physicians*, INQUIRY J., Summer 2009, at 172, 177-79.

67. See Christopher S. Armstrong & Rahul Vashishtha, *Executive Stock Options, Differential Risk-Taking Incentives, and Firm Value*, 104 J. FIN. ECON. 70, 72-73 (2011).

decisions about a time in the future. By necessity, this consideration must entail wrestling with the behavioral dynamics that impact how people make decisions under uncertainty and how they are motivated. To proceed as if executives are “ontological actors, frozen in space and time and isolated from social and cultural context,” is to settle for less than the best result for the promise of PFP.⁶⁸

III. INSIGHTS FROM BEHAVIORAL LITERATURE THAT IMPACT THE PFP MODEL

The concern about how best to structure executive compensation is one that is particularly suited to a behavioral analysis because it is a fundamental concern about how best to motivate human beings to undertake some desired behavior—in the case of PFP, to make decisions in the best interests of the corporation.⁶⁹

Behavioral theories have been applied in other areas such as public health, tobacco litigation, antitrust, and tax reform, to enhance the probability of achieving the desired result. For example, in the area of public health, health officials used findings from social theory interaction to design programs to lessen the occurrence of HIV-related sexual risk behaviors.⁷⁰ Similarly, in the area of antitrust, competition authorities in the United States, the United Kingdom, and the European Commission have all openly acknowledged the benefits to be gained by employing behavioral science theories in the design and implementation of antitrust programs.⁷¹ In legal academia, the use of behavioral science can be found in the works of Professors Sunstein, Jolls, and Stout to name a few.⁷² Probably most telling of the increasing traction of

68. R.V. Aguilera & G. Jackson, *The Cross-National Diversity of Corporate Governance: Dimensions and Determinants*, 28 ACAD. MGMT. REV. 447, 449 (2003).

69. Behavioral science is divided into two broad categories—neural (decision) science and social (communication) science. This Article is primarily concerned with the former category. Decision science encompasses those disciplines that are primarily concerned with the decision processes and individual functioning employed by the particular subject in a social environment. Examples of disciplines that fall within the decision science branch are psychology, organization theory, cognitive science, and social neuroscience.

70. See Karen Glanz & Donald B. Bishop, *The Role of Behavioral Science Theory in Development and Implementation of Public Health Interventions*, 31 ANN. REV. PUB. HEALTH, 2010, at 399; see also PROGRAM EVALUATION UNIT, N.Y. CITY. DEP'T OF HEALTH AND MENTAL HYGIENE, USING BEHAVIORAL SCIENCE: APPLYING THEORY TO PRACTICE, available at <http://www.nyc.gov/html/doh/downloads/pdf/dires/epi-ispres-behavsci20021203.pdf>.

71. See Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527, 1530-31 (2011).

72. See generally, e.g., Christine Jolls, et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998); Cass R. Sunstein, *Some Effects of Moral Indignation on Law*, 33 VT. L. REV. 405 (2009); Lynn A. Stout, *Other-Regarding Preferences and Social Norms* (Georgetown Univ. Law Center 2001 Working Paper Series in Bus., Econ., and Regulatory Policy and Pub. Law

behavioral science in the law, is that once staunch defenders of economic theory of rational choice and utility have now begun to question the utility (no pun intended) of that theory in light of the 2008 financial crisis, and have begun to acknowledge that behavioral analysis offers useful insight into actual human behavior.⁷³

A. *The Optimal Length of Contracts*

As discussed in Part II, approximately eighty-five percent of an executive's compensation is determined using a PFP model.⁷⁴ A majority of that eighty-five percent is in the form of long-term incentives, the most common forms being stock options, restricted stock, performance shares, and performance-vested stock options.⁷⁵ "Long-term" in this context typically means anywhere from three to five years, but the optimal length of a compensation contract is still the source of much debate. Compensation consultants and industry experts often design their valuation models around a three to five year time frame.⁷⁶ Some academics view the optimal length as being between two to four years, and still other academics have pointed out that a time horizon of three to five years may not be "long-term" enough because it may allow executives to reap the rewards for their decisions before the full effects of those decisions are realized.⁷⁷

Considerations that influence the determination of the optimal time frame for executive compensation contracts include tax rules, accounting standards, the nature of the industry in which the firm operates (for example, firms involved in industries with intensive research and development tend to adopt longer time frames), the timing of projects, and economic calculations of the cost to shareholders of promising a given reward.⁷⁸

Yet another consideration in choosing an appropriate time frame should be how the choice of time frame affects the value that an executive attaches to the promised reward. In the behavioral literature,

& Legal Theory, Working Paper No. 265902, Mar. 2001).

73. See generally, e.g., Richard A. Posner, *On the Receipt of the Ronald H. Coase Medal: Uncertainty, the Economic Crisis, and the Future of Law and Economics*, 12 AM. L. & ECON. REV. 265 (2010) (discussing the applicability of behavioral economics in light of the 2008 financial crisis).

74. See *supra* text accompanying note 45.

75. *Long-Term Incentive*, *supra* note 29.

76. See, e.g., MERIDIAN, 2012 TRENDS, *supra* note 23, at 20.

77. See Sanjai Bhagat & Roberta Romano, *Reforming Executive Compensation: Focusing and Committing to the Long-term*, 26 YALE J. ON REG. 359, 369 (2009); see also Alex Edmans et al., *Dynamic CEO Compensation*, 67 J. FIN. 1603, 1631-32 (2012).

78. See Bebchuk et al., *supra* note 46, at 826-28.

studies on hyperbolic discounting and the variability of discount rates are particularly useful in this regard.

1. Hyperbolic Discounting

“Hyperbolic discounting” refers to the idea that “real people . . . give more weight to events that are very immediate or very distant in time, and less weight” to events that occur at an “intermediate” time.⁷⁹ This stands in contrast with most economic thinking, which supposes that people value the present versus the future by using an exponential discounting function—meaning that the value a person attaches to a future reward decreases per unit of delay, regardless of the total length of delay.⁸⁰ Both the traditional economic view and the behavioral view agree that all things being equal, people prefer rewards sooner rather than later.⁸¹ Where they differ, is that the classical economic view assumes that people’s degree of preference for the future reward remains constant over time, while behavioral studies have found that this is in fact not the case.⁸²

To illustrate, in a 1981 study, Professor Richard Thaler asked subjects to indicate the amount of money they would demand over various time frames of one month, one year, and ten years, respectively, to make them indifferent to receiving \$15 immediately.⁸³ The median responses were \$20, \$50, \$100, respectively, implying an average discount rate of 345% over a one-month time horizon, 120% over a one-year time horizon, and 19% over a 10-year time horizon.⁸⁴ Several subsequent studies have produced similar results.⁸⁵

79. See J. Doyne Farmer & John Geanakoplos, *Hyperbolic Discounting Is Rational: Valuing the Far Future with Uncertain Discount Rates 2* (Cowles Found. Discussion Paper No. 1719, 2009), available at <http://cowles.econ.yale.edu/P/cd/d17a/d1719.pdf>.

80. See *id.* at 1-2.

81. See Paul A. Samuelson, *A Note on Measurement of Utility*, 4 REV. ECON. STUD. 155, 155-59 (1937) (describing the economic view of intertemporal decision-making); see also Jensen & Meckling, *supra* note 5, at 322-24; Kris N. Kirby et al., *Correlates of Delay-Discount Rates: Evidence from Tsimane’ Amerindians of the Bolivian Rain Forest*, 23 J. ECON. PSYCHOL. 291, 292 (2002) (describing the behavioral science view of intertemporal decision-making); Marc Wittmann & Martin P. Paulus, *Temporal Horizons in Decision Making*, 2 J. NEUROSCIENCE, PSYCHOL., & ECON. 1, 1 (2009).

82. See, e.g., Jolls et al., *supra* note 72, at 1539; see also Ted O’Donoghue & Matthew Rabin, *Doing It Now or Later*, 89 AM. ECON. REV. 103, 103, 105-06 (1999); Samuelson, *supra* note 81, at 156; Richard Thaler, *Some Empirical Evidence on Dynamic Inconsistency*, 8 ECON. LETTERS 201, 204-05 (1981).

83. Thaler, *supra* note 82, at 203 & tbl.1.

84. *Id.* at 203, 204 tbl.2.

85. See, e.g., Phillip Streich & Jack S. Levy, *Time Horizons, Discounting and Intertemporal Choice*, 51 J. CONFLICT RESOL. 199, 204-05 (2007).

According to Professors Streich and Levy what the studies reveal is that:

The greater the delay between the present (the time of decision) and the point at which the payoff occurs, the lower the discount rate, and hence, the greater the discount factor and the relative weight attached to the outcome. What this means is that the discount function flattens out more than the [traditional economic] model predicts. People are more patient for more temporally distant rewards, relative to those who engage in constant-rate discounting, and they will accept a disproportionately lower amount of compensation for longer delays for forgoing a reward in the present.⁸⁶

Although there is a substantial body of evidence that suggests that humans are “better described as hyperbolic discounters,” the conventional economic model has been slow to incorporate this learning.⁸⁷ In the executive compensation sphere, compensation models are often based on this conventional economic model and thus also assume, what behavioral findings will tell us, is an inaccurate descriptor of how people actually value future rewards.⁸⁸ For example, in valuing stock options (which, as discussed in Part II, constitute a key part of incentive compensation and the PFP model), practitioners and academics often use standard option-pricing formulas, such as Black-Scholes which assume exponential discounting, to estimate the cost of the option to the firm and its shareholders, and the value of the option to the executive.⁸⁹

Incorporating behavioral learnings on hyperbolic discounting into the debate on the optimal length of executive compensation contracts offers at least three insights. First, it signals that there is some intermediate time frame, that is the optimal time frame for motivating executives to achieve a given reward. Determining what this intermediate time frame is could well prove to be a fruitful area for additional empirical work on the optimal time frame for compensation contracts. Second, it signals that beyond this intermediate time frame the relative weight attached to the potential for earning a given reward becomes so low that the reward actually may not serve an incentivizing

86. *Id.* at 204 (citations omitted).

87. See Farmer & Geanakoplos, *supra* note 79, at 2; see also David I. Laibson, *Hyperbolic Discount Functions, Undersaving, and Savings Policy* 3-4 (Nat'l Bureau of Econ. Research Working Paper 5635, 1996), available at <http://www.nber.org/papers/w5635.pdf> (“Despite the availability of [a hyperbolic discounting] analytic framework, and the substantial body of evidence supporting hyperbolic discounting, few economists have studied the implications of hyperbolic discount functions.”).

88. See Laibson, *supra* note 87, at 2-4.

89. See Brian Hall & Kevin J. Murphy, *Stock Options for Undiversified Executives*, 33 J. ACCT. & ECON. 3, 6-8 (2002).

function for the executive—a result which would of course significantly undercut the objectives of PFP. Third, when compensation committees and compensation consultants assume a conventional economic model for valuation of a future reward, if their assumed time frame falls beyond the intermediate time frame that hyperbolic discounting would predict, they may unwittingly *over-estimate* the value an executive would actually require to be incentivized to achieve results over the defined time period, and thus may *over-compensate* the executive.

2. The Variability of Discount Rate

While studies on hyperbolic discounting point to the need to consider that the value of a future reward to an executive is not only affected by absolute lengths of time but also by relative lengths of time, studies on the variability of discount rate examine how various behavioral dynamics affect the actual discount rate that people employ to value temporally distant rewards. For example, in a study examining the relationships between individual discount rates and various socioeconomic and demographic variables, researchers found that discount rates increased with age, decreased with educational levels, and literacy, and decreased as recent income rose.⁹⁰ Similarly, a 2009 study concluded that people’s “subjective experience” of time affects the discount rate that individuals employ when valuing future rewards.⁹¹ While executives may exhibit more financial savvy and rationality in determining discount rates relative to the general population, an understanding of how people generally select individual discount rates can yield insight into the type of behavioral dynamics that may impact a given executive’s discount rate at a given firm.

Research examining the causal relationship between decision making and perception of time shows that time is experienced *subjectively* and that people make decisions in time units, with time units based on a circadian clock (roughly one day) and a circa-annual clock (roughly one year) being the most relevant in decisions related to long-term planning.⁹² Moreover, studies plotting discount rates for monetary rewards against time horizons show that discount rates are consistently high for delays up to one year and that there is little or no decline of discount rates was visible between one year and ten years.

To illustrate, consider a study of lottery winners in several states that focused on whether winners chose the smaller immediate cash

90. See Kirby et al., *supra* note 81, at 306-08, 310.

91. Wittmann & Paulus, *supra* note 81, at 3-4.

92. See *id.* at 5-6.

option or the larger delayed annuity option. The study found that at the time the ticket was purchased, more people indicated a preference for the cash option over the annuity option *should* they win, which tended to show that people were discounting the annuity option more because it was *both* improbable *and* delayed relative to the cash option.⁹³ These findings demonstrate that the discount rate used by individuals to value future rewards is highly personal, subjective, dynamic, and inconsistent for any given reward and at any given point in time.

At least four implications for executive compensation design follow from these findings. First, these findings strongly support the intuition that PFP design should not be homogenous across executives. As discussed above, various endogenous and exogenous factors affect how individuals value the promise of future rewards, and the discount factor that one employs to value a future reward is dynamic and dependent on a host of both intrinsic and extrinsic factors. While homogeneity is not required by law, the PFP model has in many ways been used to force homogenization of executive compensation design, most notably in the selection of compensation mix (discussed above in Part II.A) and in the definition of performance.⁹⁴ In addition, homogenization can be seen in proxy advisor reports on how PFP should be structured, compensation consultant reports, the academic literature, and the constant demand from shareholders to homogenize around a PFP template.⁹⁵ While factors such as firm size and industry are often taken into account, boards should be allowed much more latitude in structuring the ideal compensation package as they deem fit for their CEO and other top executives. An innovative biotech start-up, for example, may not have the same PFP goals as a mature manufacturer of photocopying machines. Similarly, a company like Facebook whose CEO is the founder and chief creator, may not need to rely on a PFP model to incentivize the executive to achieve long-term firm growth and value. As one CEO put it, “[i]t’s a

93. See Forest Baker et al., *Decision-Making in State Lotteries: Half Now or All of It Later*, 10 PSYCHONOMIC BULL. & REV. 965, 966, 969 & tbl.1 (2003).

94. Some homogenization is the result of tax and accounting rules. For an overview of these rules and their effects on executive compensation design, see Walker, *supra* note 24, at 238-40.

95. See, e.g., BEBCHUK & FRIED, *supra* note 4, at 19, 135; HEWITT & BOWIE, *supra* note 52, 4-6 (describing the types of metrics and PFP structures that ISS will deem to reflect sound corporate governance, and which will in turn affect whether ISS recommends that shareholders vote in favor of a company’s compensation package); Bebchuk et al., *supra* note 46, at 817-20; *Equilar Insight Product Suite*, EQUILAR, <http://www.equilar.com/pdfs/equilar-insight-product-suite.pdf> (last visited Feb. 7, 2013); see also *Pay for Performance*, *supra* note 52 (“In [our] opinion, compensation practices should align management’s interests with those of shareholders. We believe that executive compensation should be closely tied to company and stock performance.”); *Work Value*, HAY GROUP, <http://www.haygroup.com/au/services/index.aspx?id=30373> (last visited Feb. 7, 2013).

cookie-cutter world for evaluating executive pay. But we're not a cookie."⁹⁶

A related doctrinal point is that homogenization of PFP formulation in executive compensation contracts actually *increases* the burden on any shareholder who seeks to challenge the compensation arrangements in court. This is because the standard by which courts judge the validity of executive compensation contracts is the standard of "waste"—i.e., the contract was so one-sided that no reasonable person of "sound judgment could [have] conclude[d] that the corporation has received" any benefit.⁹⁷ One of the elements that the shareholder has to show to successfully prove waste is that no reasonable person would have approved the agreement. The more homogenized executive compensation becomes, the more difficult it is to meet this waste standard.⁹⁸

The second implication is that for "long term" incentives to truly work, the executive must be operating within a cultural and situational framework that does *in fact* encourage a focus on the long-term. As Professor Jay Lorsch aptly noted, "[o]rganizational relationships are not merely transactional and fleeting. Over time, they become imbued with affect, content, norms, values, culture, and meaning."⁹⁹ The actual cultural and situational framework within which executives operate, however, exhibits a high degree of short-termism, which does not encourage a long-term perception of time. Examples of short-termism behavior in today's corporate world include shareholders' insistence that management deliver quarterly growth, the practice of compensating executives based on stock price or current year earnings, and the practice of weekly analyst calls.¹⁰⁰ Thus, there seems to be an incongruence between the markets' and shareholders' short-term perception of time on the one hand, and the long-term perception of time that PFP attempts to inculcate, on the other. This disconnect in time perception would point to the potential for executives under-valuing future rewards because they

96. Craig Mellow, *The Optics of CEO Pay*, CORP. BOARD MEMBER, First Quarter 2002, at 37-38 (quoting Ronald "Rocky" Robins, Jr., general counsel of Abercrombie & Fitch).

97. See, e.g., *In re Walt Disney Co. Derivative Litig.*, 906 A.2d 27, 74 (Del. 2006).

98. *Cf. id.*

99. Jay Lorsch & Rakesh Khurana, *The Pay Problem: Time for a New Paradigm for Executive Compensation*, HARV. MAG., May-June 2010, at 35.

100. If the efficient market hypothesis ("EMH") holds true and the stock price fully reflects all available information in the market, including the long-term prospects of the firm, then compensating executives based on stock price would arguably not encourage short-termism. However, this is a contentious question which is beyond the scope of this paper. There is, however, a vast body of academic literature which suggests that markets often violate the EMH.

are operating within a cultural framework that rhetorically values the long-term, but in fact places a high premium on the short-term.¹⁰¹

Third, evidence that people discount the value of a future reward more if the reward is both too distant *and* too improbable, would suggest that to the extent we increase the time span of PFP compensation as has been suggested, we should think of ways to reduce the improbability of the future reward.¹⁰² One way to achieve this would be to switch from the current “pay opportunity” model to a “realizable pay” standard.¹⁰³ The pay opportunity model is the standard way of valuing long-term incentives.¹⁰⁴ It reflects how much the executive has the *opportunity* of earning, which often times has no bearing on what the executive *actually* earns.¹⁰⁵ As a leading compensation scholar put it, valuing long-term incentives this way is a “wild-a** guess” about what the executive will actually earn—i.e., it is highly improbable.¹⁰⁶ Behavioral findings would point to lessening this improbability, which could be achieved by switching to a realizable pay model, which unlike pay opportunity, attempts to calculate how much the executive actually stands to earn.

Fourth, behavioral insights on the dynamics that affect one’s discount rates could be used by practitioners to model for individual traits and thus better approximate how much value a particular executive attaches to a given reward or series of rewards. This would be similar to what is already being done in compensation valuation models that attempt to account for employee characteristics.¹⁰⁷ The most frequently modeled-for individual trait is risk aversion, thus recognizing that executives vary in their level of risk aversion and that a more risk averse executive will discount uncertain future returns more than another executive with less risk aversion. Similarly, another individual factor that models account for is the alternative investments of the executive. The behavioral literature overwhelmingly presents the case for going further and accounting for other individual traits such as levels of wealth and prior levels of income.¹⁰⁸

101. Cultivating a cultural framework that encourages a long run perception of time also links to discussions in the literature on the need to encourage “patient capital.” Patient capital is another name for long-term capital, and it is traditionally used to refer to an investor’s willingness to invest with an eye towards the long-term sustainability and value creation of the firm with no expectation of an immediate reward. *See, e.g., Patient Capital*, ECONOMIST, Feb. 10, 2007, at 84, 86.

102. *See, e.g., Edmans et al., supra note 77*, at 1621-23 (describing the use of escrow accounts and calling for increasing vesting periods).

103. Mellow, *supra note 96*, at 40.

104. *See id.* at 41.

105. *See id.*

106. *Id.*

107. *See, e.g., Walker, supra note 24*, at 241.

108. One interesting wrinkle is that while the behavioral literature often lists age as a factor that

B. *The Optimal Compensation Mix*

Yet another area where behavioral findings can be useful is in the substantive structure of compensation contracts. As discussed in Part II, the typical compensation mix includes a combination of cash salary; annual bonuses; long-term incentives in the form of stock options, restricted stock, performance shares and performance-vested stock options; severance or change in control payments; employee benefits; and various perquisites. Compensation committees and their consultants are tasked with designing executive compensation contracts that simultaneously serve the goals of the company and serve to motivate the executives to undertake actions that will help the company realize these goals.¹⁰⁹ One challenge for the compensation committee in designing these contracts is how to choose between the different forms of compensation.¹¹⁰ For a given firm, how should the compensation committee and/or consultant determine whether to award restricted stock, performance shares, or options? The answer to this question often starts by employing economic analysis in an attempt to ascertain the value of each component and then the values are summed.¹¹¹ Scholars have also attempted to account for various individual employee characteristics such as loss aversion, effort aversion, and outside investment opportunities that affect how the rewards may be valued.¹¹²

Closer afield to this Article's behavioral inquiry, are considerations on the ways in which prospect theory and the sequencing effect have decision-making implications on the choice of compensation mix.

1. Prospect Theory

Several studies have found that after some large dollar amount, the slope of the value function would flatten out and begin to approach zero (often termed diminishing marginal utility).¹¹³ Noted behavioral

could affect discount rates, building age into a compensation model would run afoul of several federal and state laws prohibiting compensation discrimination based on age.

109. See, e.g., MERIDIAN, 2012 TRENDS, *supra* note 23, at 15, 18, 21.

110. See *id.*

111. See generally Lambert et al., *supra* note 7.

112. See, e.g., Ingolf Dittmann & Ernst Maug, *Lower Salaries and No Options? On the Optimal Structure of Executive Pay*, 62 J. FIN. 303, 308-10 (2007); Anna Dodonova & Yuri Khoroshilov, *Optimal Incentive Contracts for Loss-Averse Managers: Stock Options Versus Restricted Stock Grants*, 41 FIN. REV. 451, 460-64 (2006); Oded Palmon et al., *Optimal Strike Prices of Stock Options for Effort-Averse Executives*, 32 J. BANKING & FIN. 229, 230, 233-37 (2008); Gerald A. Feltham & Martin G.H. Wu, *Incentive Efficiency of Stock Versus Options*, 6 REV. ACCT. STUDIES 7, 11-18 (2001); Yisong S. Tian, *Optimal Contracting, Incentive Effects and the Valuation of Executive Stock Options* 22, 24-28 (Apr. 30, 2001) (unpublished manuscript), available at http://papers.ssm.com/sol3/papers.cfm?abstract_id=268738.

113. See, e.g., George F. Loewenstein & Drazen Prelec, *Preferences for Sequences of*

economics scholar, Richard Thaler, observed that people displayed diminishing sensitivity over larger amounts.¹¹⁴ Thus, the percentage increase in value as one goes from 30 million to 60 million dollars, would be less than the percent increase as one goes from 3 million to 10 million dollars. At lower amounts people are more sensitive to the promise of future rewards, but there is a threshold amount at which marginal returns diminish and their sensitivity to promised future rewards begins to flatten and decline.¹¹⁵

This finding has important implications in executive compensation design for two reasons. First, many CEOs and top executives fall into the top one percent of wage earners in the United States and many are generally considered wealthy even before they become CEOs.¹¹⁶ Based on the findings of diminished marginal utility, this means that many CEOs and top executives may have diminished sensitivity at the outset of contract negotiation and thus are less sensitive to compensation incentives.

Second, even for those executives who do not start off wealthy, the more financial incentives they are offered, the more they stand to earn and actually do earn, and the less sensitive they become to these financial incentives in successive rounds of compensation design. For PFP, this presents an obvious problem—diminishing marginal utility would suggest that high powered financial incentives may not actually incentivize executives to undertake the desired behavior because their existing positions of wealth make them less sensitive to promises of more monetary award.¹¹⁷ However, a related problem may be that at larger compensation amounts the diminishing marginal utility curve flattens out, thus decreasing risk aversion. This in turn could decrease the executive's incentive to avoid decisions that present a high degree of risk to the firm, but which present very little financial risk to the executive.

A related factor that further weakens attempts to incentivize executives by linking their pay to their firm's economic performance is that executives are able to offset any equity compensation risks by

Outcomes, 100 PSYCHOL. REV. 91, 91 (1993).

114. Richard H. Thaler, *Mental Accounting Matters*, 12 J. BEHAVIORAL DECISION MAKING 183, 185 (1999).

115. *See id.*

116. *See* SANFORD C. BERNSTEIN & CO. EMBA STUDENT LEADERSHIP & ETHICS BD., EXECUTIVE COMPENSATION: HOW DOES PAY INFLUENCE DECISIONS AND GOVERNANCE? 2, available at http://www4.gsb.columbia.edu/rt/null?&exclusive=filemgr.download&file_id=7217623&rtcontentdisposition=filename%3Dbernstein-exec-comp-whitepaper.pdf [hereinafter EXECUTIVE COMPENSATION].

117. *See id.* at 2-3.

utilizing various hedging instruments, further reducing their sensitivity to offered incentives.¹¹⁸ Thus, even though a firm may have negotiated a contract which *facially* reflects tying pay to performance and hence signaling the alignment of interest and reduction in agency costs, if we account for diminished marginal utility and the fact that executives are able to hedge their risks, the contract may in fact not serve an incentivizing function.

As developed in Part IV, behavioral findings on diminished marginal utility would tend to indicate the need for compensation design to put less reliance on high powered financial rewards as the primary way to motivate senior executives to act in the long-term interests of the firm. In addition, diminished marginal utility literature would suggest that in structuring the optimal compensation mix, attention should be paid to the *incremental* effect of each element of compensation in motivating the executive, and not just on the effect of the compensation mix as a whole.¹¹⁹

2. Sequencing Effect

In addition to determining the substantive make-up of a compensation package, the compensation committee must also determine how to spread potential rewards over the life of the contract. Behavioral studies on the sequencing effect are particularly helpful in this regard. “Sequencing effect” captures the idea that while, all things being equal, individuals prefer to receive something of value sooner rather than later, there is also evidence that when people view outcomes as part of a sequence they prefer that the value of these outcomes improve over time.¹²⁰ Thus, when choosing between outcomes that are spaced over a period of time, whether people exhibit negative time preference (i.e., they prefer an *improving* sequence of events, all other things being equal) or positive time preference (i.e., they prefer to receive things sooner rather than later) “depends on whether a particular choice is viewed by the decision maker as being embedded in a sequence of outcomes.”¹²¹

The sequencing effect, for example, would predict that the typical law student would prefer to see an improvement in grades from 1L year

118. *See id.* at 2.

119. Several studies have measured the incentive effects of a given compensation contract by looking at the total compensation tied to the given performance variable. *See, e.g.,* Lambert et al., *supra* note 7, at 139 (“A number of studies . . . have measured the magnitude of the manager’s incentive to affect a performance variable *P* by calculating the percentage of his total compensation tied to *P*.”).

120. *See* Loewenstein & Prelec, *supra* note 113, at 91.

121. *Id.*

to 3L year (e.g., going from a B average to an A average), rather than earn all As 1L year, followed by all A-minuses 2L year, and all Bs 3L year, even if we assumed the cumulative GPA would be the same in all scenarios.

A number of studies have been conducted which support this theory and show that people generally prefer improving their outcome over time.¹²² One such study in 1991 found that a majority of those interviewed preferred a wage profile that started low and increased over time, to a wage profile that started high and declined or plateaued over time for an identical job.¹²³ In another study, participants were presented with a series of hypothetical choices between sequences that ended with a loss (for example, win \$10, then lose \$5) or a gain (lose \$5, then gain \$10).¹²⁴ Participants overwhelmingly preferred the sequences that ended with a gain.¹²⁵

Whether a decision-maker views a choice as isolated or as part of a sequence is affected by factors such as how the choice is framed, whether the outcomes are commensurate, and the length of the delay between outcomes. In general when outcomes are commensurable and concurrent, people are more likely to treat the outcomes as part of a sequence. Durations of intervals, how intervals are marked, and how the choices are conveyed will all have an impact on whether the decision-maker views a series of choices as being part of a sequence. The more a series of choices is viewed as part of a sequence, the greater the chance that the decision-maker will want to improve his or her outcomes over time rather than opt to receive rewards immediately. As noted by Professors Loewenstein and Prelec, "when the decision frame draws attention to the sequential nature of choice, negative time discounting typically prevails; however, when the frame draws attention to individual components of the choice, positive time preference predominates."¹²⁶

Even assuming that a decision-maker views a series of choices as part of a frame and thus exhibits an overall sequencing effect, an additional layer which the behavioral science literature addresses is that people generally prefer to spread outcomes over time rather than

122. See, e.g., George F. Loewenstein & Nachum Sicherman, *Do Workers Prefer Increasing Wage Profiles?*, 9 J. LAB. ECON., 67, 69-70 (1991); see also William T. Ross & Itamar Simonson, *Evaluations of Pairs of Experiences: A Preference for Happy Endings*, 4 J. BEHAVIORAL DECISION MAKING 273, 273-75 (1991); Carol Varey & Daniel Kahneman, *Experiences Extended Across Time: Evaluation of Moments and Episodes*, 5 J. BEHAVIORAL DECISION MAKING 169, 170-71 (1992).

123. See Loewenstein & Sicherman, *supra* note 122, at 69, 71-72, 74-75.

124. Ross & Simonson, *supra* note 122, at 276-77.

125. *Id.* at 277-78.

126. See Loewenstein & Prelec, *supra* note 113, at 91.

concentrating them—an observation referred to as the “preference for spreading.”¹²⁷ Studies have found that for both gains and losses people prefer spreading rather than grouping them in clusters. Precisely how people prefer to group gains and losses remains unsettled, but there is widespread consensus in the behavioral science literature that people’s preferences for a sequence of outcomes have to do with “how evenly the good and bad outcomes are arranged over the total time interval.”¹²⁸ Thus, using our law student example discussed previously, the preference for spreading would dictate that if given the choice between Grade Sequence 1 of “A, C+, B” and Grade Sequence 2 of “B-, B-, A,” in general the student would prefer Grade Sequence 1 because Grade Sequence 2 piles up too many losses (i.e., two B-minuses) in one semester relative to Grade Sequence 1.

In terms of compensation design, the sequencing effect supports framing the terms of compensation agreements and PFP as part of a larger plan, scheme, or sequence. If executives view their one year benchmark as being separable from their five-year benchmark then there is a risk that executives will discount the value of the five-year future reward and not be motivated to make the decisions to achieve the five-year metric. If, on the other hand, executives view their compensation arrangement as a sequence of events spread over a period of time, then the human urge to improve their preferences over time should spur executives to stay the course for the desired five years and improve their outcome.

Second, care should be taken that compensation arrangements reflect an escalation of rewards and an even spreading of potential gains and losses. If an agreement seems too punitive, i.e., potential for losses are grouped together, this could actually serve as a deterrent to executives because they would rather be paid a steady smaller amount rather than take the risk and experience a series of losses. Similarly, if all the value is on the back end of the sequence, this will be discounted more and thus serve less of an incentivizing function.

C. The Gaming of Peer Groups and the Abuse of Medians

A key method used by companies, their shareholders, and other market players to assess how adequately executive pay is tied to firm performance is to look at similarly situated firms or “peer” firms in the industry. The SEC requires public companies to list all peer companies used in their compensation setting process and a description of the

127. *See id.* at 94.

128. *See id.* at 94-95.

process employed in selecting a peer group.¹²⁹ A well-designed peer group is often thought to be one that is constructed based on considerations such as:

- [company] size
- industry
- organizational structure
- geographical location
- performance [goals].¹³⁰

The use of peer groups can be helpful in understanding the form and design of compensation at similar companies, as well as, the levels of pay opportunity and actual pay delivered to executives at these companies.

One common concern about the use of peer groups is that those in charge of setting executive pay may “gam[e] the selection of peers for the purposes of gaming executive compensation.”¹³¹ For example, one might point to the case of the NYSE whose peer group included several financial institutions substantially larger than the NYSE, but did not include any of the other stock exchanges.¹³² A more extreme example can be found in the case of Tootsie Roll Industries, Inc., whose sales revenue is approximately eighty-five times lower than Kraft Foods, Inc., yet Tootsie Roll includes Kraft as a peer.¹³³ In 2009, the Wall Street Journal reported that “roughly 40% of companies specify that they aim to pay their CEOs more than the median of their peers,” a result which, according to a director of a leading proxy advisor, leads to a “continuous[] spiral[] upwards” in executive pay.¹³⁴ Similarly, corporate scholar Charles Elson has stated that the “sharp rise in executive pay [is] a result of the practice of setting C.E.O. compensation by looking at what other companies in the same industry are doing, then adding a bit.”¹³⁵

129. MERIDIAN COMPENSATION PARTNERS, LLC, COMPENSATION COMMITTEE HANDBOOK: DEVELOPING EFFECTIVE PEER GROUPS 1 (2011), available at http://www.meridiancp.com/images/uploads/25_Developing_Effective_Peer_Groups.pdf.

130. *Id.*

131. Cari Tuna, *Picking Big ‘Peers’ to Set Pay*, WALL ST. J., Aug. 17, 2009, at B7.

132. See Michael Faulkender & Jun Yang, *Inside the Black Box: The Role and Composition of Compensation Peer Groups*, 96 J. FIN. ECON. 257, 258 n.2 (2010) (noting that in 2002, the year prior to Richard Grasso’s (former CEO at the NYSE) departure, the NYSE’s peer group included large financial institutions like Citigroup, FleetBoston Financial, Merrill Lynch, GE Capital, GMAC, and American Express).

133. See Tuna, *supra* note 131, at B7.

134. *Id.*

135. Nathaniel Popper, *C.E.O. Pay, Rising Despite the Din*, N.Y. TIMES, June 17, 2012, at B9.

One response to this observation that compensation committees and boards may reward above the median thus leading to an “upward spiral” in executive compensation, is that this may be an example of managers exercising power over the board to extract rents. An alternative response is that the selection of peers that perform better can be attributed to what one academic called the “Lake Wobegon effect,” where every firm believes that they have hired above average executives and so they both select “peers” who they view as above average, and, using these peers as their benchmark, pay their executives above the group average.¹³⁶ Whether this “gaming” of the selection of peers results from self-serving motivations or something less nefarious remains the subject of much debate. As one author of a study on peer group selection put it, “I don’t honestly believe that everybody is self-serving But I also don’t believe that everybody is doing this purely naively.”¹³⁷

That companies continue this upward spiral trend in executive pay and continue to select seemingly non-comparable companies to include in their peer group—even in the face of increased transparency in the compensation process, greater accountability to shareholders, and public outrage over wealth disparity—are of particular concern to observers. At least two explanations for this behavior can be found in behavioral studies on the “herding effect” and the cognitive bias of “anchoring and adjustment.”

1. The Herding Effect

The concept of “herding” refers to the tendency of humans (or animals for that matter) to mimic the actions (both rational and irrational) of a large group.¹³⁸ Herding can be described as “a form of convergent social behavior that can be broadly defined as the alignment of the thoughts or behaviors of individuals in a group (herd) through local interaction and without centralized coordination.”¹³⁹ In general, herding behavior can be broken down into two broad categories. First, herding that is based on information—i.e., the reason that individuals engage in certain activities is because they have private information or they can infer information from others’ actions that dictate that they take

136. See Rachel M. Hayes & Scott Schaefer, *CEO Pay and the Lake Wobegon Effect*, 94 J. FIN. ECON. 280, 280-82 (2009). Lake Wobegon is a fictitious town in Garrison Keillor’s “A Prairie Home Companion” radio show where “all the children are above average.” *Id.* at 280.

137. Tuna, *supra* note 131, at B7 (quoting Professor Rodrigo Verdi of Massachusetts Institute of Technology’s Sloan School of Management).

138. See Ramsey M. Raafat et al., *Herding in Humans*, 13 TRENDS COGNITIVE SCI. 420, 420 (2009).

139. *Id.*

a certain course of action.¹⁴⁰ In this instance, herding would be described as rational.¹⁴¹ Second, and on the other hand, where behavior is undertaken simply because others in the group undertook that behavior, the behavior may be entirely irrational.¹⁴² Thus the more people undertake an action the more likely it is that others exposed to that action will follow suit (irrespective of whether said action is rational or irrational).

The herding effect has been widely studied in a number of fields, such as behavioral finance, ethology, and social psychology.¹⁴³ A vast and varied range of phenomena have been categorized as examples of herding behavior. These include stock market bubbles, financial speculation, Tulip mania, cult behavior, and uncoordinated social groupings that have become part of common parlance such as “fads,” the “bandwagon effect,” “mass hysteria,” and “Groupthink.”¹⁴⁴

In the executive compensation space, herding may have been unwittingly encouraged by the SEC’s CD&A rules, which require companies to disclose the compensation of their top five executives and how the packages are structured. Since no company or executive wants to be singled out as a bad apple, companies and executives may be induced to “herd” in the way that they benchmark, structure, and describe their executives’ compensation.¹⁴⁵ This is particularly true in light of the recent enhanced disclosure rules, which require companies to provide detailed tabular and narrative disclosure about their executives’ compensation.¹⁴⁶ Of course, what this means is that the amount executives make at each company is now transparent, and firms and

140. *See id.* at 421.

141. *See id.*

142. *See id.* at 423.

143. *See generally* MARKUS K. BRUNNERMEIER, *ASSET PRICING UNDER ASYMMETRIC INFORMATION: BUBBLES, CRASHES, TECHNICAL ANALYSIS, AND HERDING* (2001) (discussing the effect of herding on the economy); *see also* Michelle Baddeley, *Herding, Social Influence and Economic Decision-Making: Socio-Psychological and Neuroscientific Analyses*, 365 *PHIL. TRANSACTIONS ROYAL SOC’Y B* 281, 282-85 (2010); W.D. Hamilton, *Geometry for the Selfish Herd*, 31 *J. THEORETICAL BIOLOGY* 295, 297-300 (1971) (discussing how herd behavior can emerge from the coordinated behavior of individual animals engaged in predator avoidance).

144. *See, e.g.*, Douglas M. Patterson & Vivek Sharma, *Did Herding Cause the Stock Market Bubble of 1998–2001?* 4-5 (Nov. 18, 2007) (unpublished paper), available at https://www.editorialexpress.com/cgi-bin/conference/download.cgi?db_name=SNDE2008&paper_id=60; *see also* JOE SMITH, *HERDING THE MOO: EXPLOITS OF A MARTIAL ARTS CULT, LEGEND OF THE UPSIDE DOWN KING* 291-95 (2006); Robert R. Prechter, Jr., *Unconscious Herding Behavior as the Psychological Basis of Financial Market Trends and Patterns*, 2 *J. PSYCHOL. & FIN. MARKETS* 120, 121 (2001); Susan Cain, *The Rise of the New Groupthink*, *N.Y. TIMES*, Jan. 15, 2012, at SR1.

145. Disclosure Requirements, *supra* note 53.

146. *Id.*

executives are now in a position to get a peek at their competitor's figures and know how they compare to market. Executives and companies seeking to hire executives or re-negotiate an executive's pay package can all see these figures, and the more those figures coalesce around a norm, the more likely each company will execute an executive compensation contract that adopts this norm and thus follows the herd.

The danger in behavioral herding is that it creates a situation where there is a large group of actors undertaking an action that may be highly irrational for a large number of them. In the context of stock markets, such irrational herding behavior could result in market instability, large scale losses, and a destabilization of stock prices.¹⁴⁷ Similarly, in the context of executive compensation, irrational herding behavior could result in a macro shift away from optimal contracts to more bloated compensation contracts and a continued upward spiral in compensation without a commensurate accrual of value to shareholders.

In addition, the literature on herding highlights that when an individual's behavior aligns with that of the rest of the group, a process of de-individuation occurs.¹⁴⁸ De-individuation describes the process by which individuals who are part of a group lose their sense of individuality and, as a result, the normal constraints against deviant behavior are diminished.¹⁴⁹ De-individuation has been conceived as a phenomenon where "anonymity and reduced feelings of individual responsibility provide a mechanism for situational forces to collectively drive behavior immersing the individual into the coup or herd."¹⁵⁰ In the context of executive compensation, de-individuation can explain why even in the face of criticism that a company is using a skewed peer group, a company does not adjust its peer group in response to this criticism but instead rationalizes its choice of peer group in an attempt to pass public scrutiny. In a sense, herding and the accompanying de-individuation could function as an insurance policy for a company that is following the norm, but yet may be making irrational choices that are suboptimal for that particular company.

147. See, e.g., Andy Puckett & Xuemin (Sterling) Yan, *Short-Term Institutional Herding and Its Impact on Stock Prices* 6 (Mo. Sch. Bus., Working Paper), available at <http://business.missouri.edu/yanx/research/Herding.pdf>; see also ROBERT J. SHILLER, *IRRATIONAL EXUBERANCE* 151-53 (2d ed. 2005) (discussing informational cascades); Boğaçhan Çelen & Shachar Kariv, *Distinguishing Informational Cascades from Herd Behavior in the Laboratory*, 94 AM. ECON. REV. 484, 484 (2003) (describing how an informational cascade occurs "when an infinite sequence of individuals ignore their private information when making a decision").

148. Raafat et al., *supra* note 138, at 424.

149. See *id.*

150. *Id.* (footnote omitted).

Further empirical work needs to be undertaken in this area to assess whether the executive compensation process exhibits behavioral herding, and if so whether such herding is rational or irrational behavior. Analyzing peer group selection through this light could help policy-makers in designing policies that limit irrational herding in peer selection, while eschewing policies that seek to correct seemingly skewed results, but which are really the result of rational herding.

2. Anchoring and Adjustment

Like herding, the behavioral concept of “anchoring and adjustment” offers additional insight into why companies pay their executives above the median of their selected peer group. “Anchoring and adjustment” refers to the idea that people become so wedded or “anchored” to the initial value that it becomes their point of reference, and any “adjustments” will be made from that initial value.¹⁵¹ To illustrate, in a widely cited experiment on the anchoring effect, participants were asked to estimate various quantities, stated in percentages (e.g., the percentage of African countries in the United Nations).¹⁵² For each quantity, a number between zero and one hundred was determined by spinning a wheel in the participant’s presence. The participants were instructed first to indicate whether that number was lower or higher than the value they estimated, and then to estimate the value of the quantity by increasing or decreasing from the given number. Different numbers were given to different groups, and these arbitrary numbers had a notable effect on the participants’ estimates. For example, the authors highlighted that the median percentage estimates of the percentage of African countries in the United Nations were 25% and 45% depending on whether participants received an arbitrary number of 10% or 65%, respectively.¹⁵³

As Professors Tversky and Kahneman noted:

[i]n many situations, people make estimates by starting from an initial value that is adjusted to yield the final answer. The initial value, or starting point, may be suggested by the formulation of the problem, or it may be the result of a partial computation. In either case, adjustments are typically insufficient.¹⁵⁴

151. Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 SCI. 1124, 1128 (1974).

152. *See id.*

153. *Id.*

154. *Id.*

Anchoring has been observed not only when a starting value is given to a participant, but also when a participant bases his or her estimate on the result of an incomplete computation. To illustrate, Professors Tversky and Kahneman asked participants to take five seconds to estimate the answer to *Problem 1*: $8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$, and record their estimate.¹⁵⁵ The professors then asked the same subjects to take another five seconds to estimate the answer to *Problem 2*: $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8$, and record their estimate.¹⁵⁶

Most people provided a higher estimate for Problem 1 than for Problem 2 because they became anchored to the higher numbers presented first in Problem 1. When given to two groups of high school students, the median estimate for Problem 1 was 2250, while the median estimate for Problem 2 was 512. The correct answer is 40,320.¹⁵⁷

Anchoring and adjustment provides an alternative explanation for why we have continued to observe an upward spiral in executive pay even in the face of increased transparency in the compensation process, greater accountability to shareholders, and public outrage over wealth disparity. PFP makes a significant percentage of an executive's compensation uncertain because it is dependent on the achievement of various performance measures at some point in the future, which are not entirely within the executive's control. Thus executives and the boards negotiating an executive compensation agreement are forced to make judgments under uncertainty, which in turn leaves more room for mental short-cuts and other biases, such as anchoring and adjustment.¹⁵⁸ When people engage in anchoring and adjustment the resulting value may be suboptimal. Additionally, if as discussed above, the homogenization in executive PFP design is the result of irrational herding behavior, then the initial starting value to which people become anchored will be suboptimal and will further exacerbate the suboptimality of the resulting contract, because any adjustments upward or downward will be insufficient.

D. *The Danger of Ex Ante Financial Metrics*

An inherent feature of the PFP model is that it requires the parties to pre-define the future goals to be attained and upon which compensation will be based. In turn, these pre-determined goals tend to be predominantly financial in nature with the most common ones being

155. *Id.*

156. *Id.*

157. *Id.*

158. *Cf. id.*

the achievement of a defined level of total shareholder return or the achievement of a certain stock price. The use of financial goals has been roundly criticized for encouraging nefarious behavior by executives such as earnings manipulations and accounting massaging.¹⁵⁹ Thus, much of the critiques focus on external and observable drawbacks created by the use of *ex ante* financial metrics.

Of equal concern however, are the internal and intrinsic changes that may occur on both an institutional and individual level with the use of *ex ante* financial metrics. Of particular concern in this regard are behavioral studies on optimism bias, outcome bias, and “crowding out.”

1. Optimism Bias

“Optimism” is the tendency to “put the most favorable construction upon actions” and events or to “anticipate the best possible outcome.”¹⁶⁰ Behavioral studies on the effects of optimism in decision-making under uncertainty reveal that people tend to be overly optimistic about their chances realizing for future gains, and overly optimistic about their chances for avoiding future losses (also referred to as the “optimism effect” or “optimism bias”).¹⁶¹ In the executive compensation space, optimism bias could unwittingly cause boards and executives to agree to unachievable performance targets *ex ante*.

According to behavioral researchers Berndsen and van der Pligt, “optimism has asymmetric effects on time preferences for gains versus losses.”¹⁶² With respect to future outcomes, “losses are believed to be avoidable and immediate gains are expected to be followed by further gains.”¹⁶³ Researchers have observed optimism bias in various decision-settings where individuals are asked to make judgments that involve uncertainty about the future.¹⁶⁴ These include studies on how students tend to overestimate a future exam score; observations that financial analysts consistently overestimate corporate earnings; and studies on cigarette smokers who tend to believe that they have less of a chance of developing smoking-related complications than other smokers.¹⁶⁵

159. See Faulkender et al., *supra* note 1, at 113.

160. WEBSTER'S DICTIONARY 1584-85 (3d ed. 2002).

161. See Mariëtte Berndsen & Joop van der Pligt, *Time Is on My Side: Optimism in Intertemporal Choice*, 108 ACTA PSYCHOLOGICA 173, 175, 185 (2001).

162. *Id.* at 173.

163. *Id.* at 175.

164. See Neil D. Weinstein & William M. Klein, *Resistance of Personal Risk Perceptions to Debiasing Interventions*, in HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 313, 313-14, 320 (Thomas Gilovich et al. eds., 2002).

165. See David A. Armor & Shelley E. Taylor, *When Predictions Fail: The Dilemma of Unrealistic Optimism*, in HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT,

Similarly, credit card companies may be implicitly exploiting cardholders' optimism biases because these companies understand that people are generally willing to accept the prospect of highly punitive interest rates in the event of late payments, because individuals are generally optimistic that they will never be late in payment.¹⁶⁶

The optimism bias mindset is perfectly exemplified by Barclays PLC's former CEO, Bob Diamond, who was renowned for setting aggressive targets for the bank—a trait which some inside the bank referred to as “Bobtivism.”¹⁶⁷ While some would attribute Mr. Diamond's aggressive goal setting to nefarious motives, others viewed him as always having a positive outlook, or, to use the words of *The Economist*, he was “congenitally bullish.”¹⁶⁸ Such congenital bullishness may have been the external expression of optimism bias.

In terms of experiential learning, Hewlett-Packard (“HP”), which, in the early 1990s, implemented a PFP model at thirteen separate company units, offers a case in point.¹⁶⁹ Within three years, all thirteen units had dropped the PFP compensation structure.¹⁷⁰ One of the findings of the HP experiment was that people thought that they could outperform the predefined metrics.¹⁷¹ According to Harvard Business School Professor Michael Beer, who studied the HP experiment, “the most prevalent and striking themes in managerial decision-making in these cases is the size of the gap between managers' initial expectations [of benefits] and the subsequent realities [in terms of costs]. . . . Managers were also overly optimistic about the benefits that would be achieved,” assuming they would benefit in terms of higher pay.¹⁷²

These examples indicate that optimism bias could lead both executives and boards to agree to unrealistic predefined targets, whose achievement may not be feasible to achieve. Thus, even though pay may be tied to performance facially, if the stated performance is unrealistic then the executive may tie up limited resources pursuing this unrealistic

supra note 164, at 334, 334-35, 338.

166. See Joshua M. Frank, *Do Credit Card Users Systematically Underestimate Their Interest Rates? Evidence from the Survey of Consumer Finances*, 30 J. PUB. POL'Y & MARKETING 133, 134-35 (2011).

167. Harry Wilson, *Can Barclays' Future Live up to the 'Bobtivism' of Chief Bob Diamond?*, TELEGRAPH (Oct. 29, 2011, 11:00 PM), <http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/8856001/Can-Barclays-future-live-up-to-the-Bobtivism-of-chief-Bob-Diamond.html>.

168. *The Power of Bobtivism*, ECONOMIST (Apr. 27, 2012, 8:22 PM), <http://www.economist.com/blogs/schumpeter/2012/04/barclays-agm>.

169. Michael Beer & Mark D. Cannon, *Promise and Peril in Implementing Pay for Performance*, 43 HUM. RES. MGMT. 3, 5 (2004).

170. *Id.* at 7.

171. *See id.* at 15.

172. *Id.* at 13.

target, while foregoing other more realistic targets that could better contribute to company growth. Studying optimism bias in the executive compensation space could provide a better understanding of how boards and executives make decisions under uncertainty, which in turn would provide policy makers an opportunity to better influence their choices.¹⁷³

2. Outcome Bias

The PFP model is outcome focused. It explicitly and implicitly causes executives, companies, stockholders, analysts, the media, and legislatures to focus overwhelmingly on the outcome achieved, and gives short shrift to whether the outcomes were the result of a sound and reasonable process.¹⁷⁴ The focus on outcome over process and the use of outcome as a proxy for judging the inherent quality of a process is often referred to as the “outcome effect.”¹⁷⁵ For instance, if a coach draws up a play in the final seconds of a game which results in a winning shot, then the coach’s decision to call that play will be rated more favorably than if the play resulted in the team losing. Of course the problem is that the quality or correctness of the coach’s decision should not necessarily be a function of the outcome, especially in a case where the resulting outcome was affected by some external forces beyond the coach’s control.¹⁷⁶

A focus on outcomes is detrimental to a decision-making and/or reward model because good processes that lead to bad outcomes go unrewarded, while bad processes that lead to good outcomes reap rewards.¹⁷⁷ Thus, an executive who fails to deliver on stock price, but has successfully steered a company through a difficult period, may be viewed less favorably than an executive whose company meets its earnings targets, but who did not have to deal with the same difficulties faced by the first executive. A case in point may be Facebook. Prior to the company’s initial public offering in early 2012, Mark Zuckerberg, the company’s CEO, was often praised for his decision-making prowess.¹⁷⁸ Less than a year after the company went public, in the face

173. See Bermdsen & van der Pligt, *supra* note 161, at 185 (stating that “[k]nowing which optimistic beliefs underlie people’s choices might contribute to an understanding of time preferences, and also provide the opportunity to influence their choices”).

174. See EXECUTIVE COMPENSATION, *supra* note 116, at 3.

175. See Baron & Hershey, *supra* note 16, at 570-71.

176. Cf. Bermdsen & van der Pligt, *supra* note 161, at 185.

177. Cf. *id.*

178. See Jena McGregor, *Mark Zuckerberg’s New Challenge with Facebook*, WASH. POST (Aug. 17, 2012), http://www.washingtonpost.com/blogs/post-leadership/post/mark-zuckerbergs-new-challenge-with-facebook/2012/08/17/e2408744-e877-11e1-8487-64e4b2a79ba8_blog.html.

of declining stock prices, Mr. Zuckerberg's decisions are beginning to be questioned with some critics even calling for his resignation.¹⁷⁹

Awareness of the potential for outcome bias in the PFP model is essential because: (1) where performance targets are met, outcome bias could lead to people substituting achievement of the target metrics as evidence that the executive is doing a good job—i.e., in fact aligning his or her interests with those of shareholders and the corporation, and engaging in the right level of creative thinking and risk taking; and (2) conversely, where performance targets are not met, outcome bias could lead people to irrationally and unfairly judge the performance of the executive as being poor and unsatisfactory even though the executive's decision making was sound. Moreover, in today's corporate world, the effects of any outcome bias are magnified by short-termist practices, like measuring a company's progress based on quarterly returns, which emphasize the short-term outcomes, even though those outcomes may be the result of flawed processes that may only come to light after the firm and the executive have been rewarded by the market for meeting the short-term goal.

In corporate law, the business judgment rule—a judge-made doctrine which prevents a court from second-guessing the business judgments of a corporation's board and its executives absent evidence of fraud, bad faith, or gross negligence in the decision process—acts as a backstop to the outcome effect.¹⁸⁰ So long as the board of directors and the officers can show that their decision-making process was conducted with a modicum of diligence, reasonableness, care, and good faith, courts will accept the resulting outcome of that process and will not second guess the decisions of the corporation's board or its officers.

The Delaware Chancery Court's articulation of the business judgment rule in the case of *In re Caremark International Inc. Derivative Litigation* poignantly highlights how courts guard against outcome bias in considering whether directorial liability can stem from a business decision.¹⁸¹ In *Caremark* the court stated that:

179. *See id.*

180. The business judgment rule is a court made doctrine that protects the decisions of company boards and managements from being independently reviewed or second-guessed by the courts so long as the courts find that the decision-making *process* reflects that management was acting on an informed basis, with the honest belief, and in good faith in the best interest of the corporation. *See, e.g., Smith v. Van Gorkom*, 488 A.2d 858, 872-73, 893 (Del. 1985) (holding that the Board of Directors did not reach an informed business judgment, due to a failure to inform themselves and their stockholders about a proposed merger, when voting to sell shares for a cash-out merger and therefore were not entitled to protection from the business judgment rule); *In re Caremark Int'l Derivative Litig.*, 698 A.2d 959, 967 (Del. Ch. 1996).

181. *In re Caremark*, 698 A.2d at 967-68.

[W]hether a judge or jury considering the matter after the fact, believes a decision substantively wrong, or degrees of wrong extending through “stupid” to “egregious” or “irrational”, provides no ground for director liability, so long as the court determines that the process employed was either rational or employed in a *good faith* effort to advance corporate interests.¹⁸²

In the context of executive compensation, courts often look to the process for setting the compensation, rather than the resulting compensation itself. It is of no consequence to the courts how excessive or ill-advised the compensation appears—so long as the process through which the compensation was set appears that it was reasonable and in good faith. A case in point is that of *In re Walt Disney Derivative Litigation*,¹⁸³ which dealt with whether the executive compensation of the former president of Disney, Michael Ovitz, was excessive and wasteful. The Delaware Supreme Court affirmed the chancery court’s refusal to apply its own judgment and analyze whether the resulting compensation was excessive, because the court found that the decision making process was sound.¹⁸⁴ While this process-focused analytical framework employed by courts may lead to seemingly unjust results, it is in recognition of the truism that hindsight is indeed 20/20.

In addition to relying on the business judgment rule when faced with litigation, one way to lessen the potential for outcome bias outside of a litigation setting is to reward executives for sound decision-making processes. This may not necessarily have to be in the form of a monetary reward, but recognitions in the form of more autonomy, more resources, or use of the much maligned corporate jet.¹⁸⁵

3. Crowding Out

As alluded to in Part II.B, the current PFP regime encourages and engenders a culture of executives and shareholders that are overly focused on financial outcomes, at the expense of inculcating other worthy and intrinsic values such as creativity, trust, empathy, honesty, and self-confidence. To put it differently, PFP suffocates an executive’s instinct to act on these intrinsic values in situations where such actions will not lead to the achievement of predefined metrics. This unfortunate result has been observed in other areas and is referred to as “crowding out.”

182. *Id.* at 967.

183. 906 A.2d 27 (Del. 2006).

184. *Id.* at 35, 73.

185. See discussion *infra* Part IV.

The behavioral science studies on crowding out reflect that when a reward system motivates by offering the prospect of money or a penalty in the form of a monetary fine, people narrow their decision perspective and predominantly focus on the monetary aspect of what is being offered either as punishment or reward.¹⁸⁶ This predominant focus on the pecuniary tends to erode worthy intrinsic human characteristics that we would like to encourage.¹⁸⁷

Examples of crowding out abound both in experimental studies and the real world. One study involved a day care with the problem of parents who were repeatedly late in coming to collect their children at the end of the day.¹⁸⁸ As one can imagine, late pickups impacted the day care because they had to stay open longer thereby incurring various additional expenses, and beyond the monetary impact, employees were tired and wanted to go home to their own families and attend to their own needs.¹⁸⁹ Upon the advice of experts, the day care adopted a fine system. Parents would be charged a monetary fine for each increment of time that they were late.¹⁹⁰ To everyone's surprise instead of the number of late pick-ups decreasing, they actually increased!¹⁹¹ Why? Well, after talking to the tardy parents, the day care discovered that parents were simply building in the cost of the fine into their calculus of whether to be late, which included a calculation of just how late they could afford to be.¹⁹² Once they had built in the fine, their conscience was free and they felt no impulse to try to pick up their children on time.¹⁹³ In other words the fine had crowded out whatever intrinsic motivation the parents may have had to act in a selfless way towards the day care by being on time.

In the world of sports, consider the case of former NFL player Rodney Harrison. In 2010, NBC's *Football Night in America* ran a story on Harrison who was notorious for what some viewed as unsportsmanlike conduct, such as taunting on the field and helmet-to-helmet hits.¹⁹⁴ The NBC reporter asked Harrison whether the thousand

186. See Juan Cardenas et al., *Local Environmental Control and Institutional Crowding*, 28 WORLD DEV. 1719, at 1719-20, 1731.

187. See generally STOUT, *supra* note 18.

188. See Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 J. LEGAL STUD. 1, 1-3 (2000).

189. See *id.* at 4.

190. *Id.* at 4-5.

191. *Id.* at 5-7.

192. *Id.* at 14.

193. See *id.* at 13-14.

194. Vic Carucci, *Rodney Harrison: Suspensions Only Way to Stop Vicious Hits*, NFL (Oct. 19, 2010, 8:36 PM), <http://www.nfl.com/news/story/09000d5d81b76c8b/article/rodney-harrison-suspensions-only-way-to-stop-vicious-hits> (discussing how hefty fines were not enough to deter players from engaging in helmet to helmet hits); Jim Trotter, *After Week 6 Carnage, NFL Has to Protect Defenseless Players*, SPORTS ILLUSTRATED (Oct. 19, 2010, 11:02 AM),

dollar fines assessed by the NFL each time a player engaged in this type of conduct did not deter him.¹⁹⁵ He responded that the fine was not a deterrence, but rather a cost of doing business.¹⁹⁶ Harrison then revealed that he used to set aside thousands of dollars at the start of every season to pay fines for big hits.¹⁹⁷

In the business world, examples of crowding out can be found in mortgage brokers who knowingly gave loans to borrowers who they knew could not afford these loans, predominantly because they were incentivized to approve unqualified buyers because these brokers' outcome-based bonuses depending on the *bulk* of loans generated and not the *quality*.¹⁹⁸ Similarly, the testimony of former UBS banker, Bradley Birkenfield, in the U.S. Justice Department's case charging UBS with coordinating a massive scheme to help wealthy Americans evade U.S. tax laws, reveals the existence of crowding out.¹⁹⁹ When asked by the judge to explain why he did what he did, he quietly said "I was employed by UBS . . . I was incentivized to do this business."²⁰⁰

In the executive compensation space, the HP case study referred to previously provides a real world example of how the PFP performance model can lead to crowding out.²⁰¹ At first the HP employees embraced the new PFP system, but over time frustrations began to build and some anti-social behavior began to emerge, which in turn had a negative effect on productivity.²⁰² For example, teams that were meeting their targets would often refuse to admit people whom "they thought might be below their level of competence."²⁰³ This led to disparities among teams, reduced the mobility between teams, and prevented the transfer of learning across teams.²⁰⁴ In discussing the case of HP, the researchers noted that as "other scholars have argued . . . the real problem is that incentives work too well. Specifically, they motivate employees to focus

<http://sportsillustrated.cnn.com/vault/article/web/COM1176128/index.htm>.

195. Carucci, *supra* note 194.

196. *See id.*; Trotter, *supra* note 194.

197. Carucci, *supra* note 194; Trotter, *supra* note 194.

198. *See, e.g.,* Dunstan Prial, *Big Housing Fraud Settlements, but No Convictions*, FOX BUS. (Oct. 12, 2012), <http://www.foxbusiness.com/government/2012/10/12/big-housing-fraud-settlements-but-no-convictions>; E. Scott Reckard, *Senate Votes to Ban Certain Bonuses for Mortgage Brokers, Loan Officers*, L.A. TIMES (May 12, 2012), <http://articles.latimes.com/2010/may/12/business/la-fi-mortgage-bill-20100513>.

199. Evan Perez, *Guilty Plea by Ex-Banker Likely to Aid Probe of UBS*, WALL. ST. J., June 20, 2008, at C1.

200. *Id.*

201. *See* Beer & Cannon, *supra* note 169, at 3, 5, 9-10.

202. *Id.* at 8-11.

203. *Id.* at 8.

204. *Id.*

excessively on doing what they need to do to gain rewards, sometimes at the expense of doing other things that would help the organization.”²⁰⁵

What Professors Beer and Cannon witnessed at HP was the phenomenon of crowding out. The introduction of a PFP system of rewards actually had the negative effect of driving out *prosocial* behavior and planting fertile ground for *antisocial* behavior. In the end, the HP units were no better off, but in fact they were probably worse off even though they had introduced a pay system that was supposed to bring about more optimal and efficient behavior.

If one were to consider the effects of crowding out in the executive compensation space, at least three unwanted and pernicious results come to mind. First, to the extent that one believes there are problems of greed and selfishness across the CEO population, then PFP actually encourages these characteristics of greed and selfishness rather than discourages them.²⁰⁶ One only need read the academic literature, newspaper articles, blogs, and congressional records to see that it is indeed the case that there seems to be a widespread belief that CEOs are greedy and selfish and, in some cases, just plain bad.²⁰⁷ Responding to this premise that CEOs are greedy and selfish, the promise of PFP was intended to rein in and align executives’ behavior with the interests of their firm and shareholders by tying executive pay to firm performance.²⁰⁸

Ironically, while corporate law does not require a relentless focus on financial gain, PFP does.²⁰⁹ The irony is further heightened because the whole premise of PFP is that it would bring about better conduct, but

205. *Id.* at 4.

206. *See, e.g.*, Lucian A. Bebchuk et al., *The CEO Pay Slice*, 102 J. FIN. ECON. 199, 201, 216, 219-20 (2011); Louise Story, *Wall Street Profits Were a Mirage, but Huge Bonuses Were Real*, N.Y. TIMES, Dec. 17, 2008, at A1.

207. *See* Story, *supra* note 206, at A1.

208. *See, e.g.*, BEBCHUK & FRIED, *supra* note 4, at 19.

209. *See, e.g.*, *Dodge v. Ford Motor Co.*, 170 N.W. 668, 684 (1919) (holding that the court will not interfere with the business judgment of the corporation in a derivative action brought by shareholders against the corporation to issue dividends); *see also* Einer Elhague, *Sacrificing Corporate Profits in the Public Interest*, 80 N.Y.U. L. REV. 733, 734 (2005) (arguing that managers will be constrained in how much they pursue non-profit goals by “various market forces,” such as shareholders). State statutes generally allow the corporation to have as its purpose any lawful business or any lawful purpose. For example, the Delaware General Corporation Law states that, “[a] corporation may be incorporated or organized under this chapter to conduct or promote any lawful business or purposes, except as may otherwise be provided by the Constitution or other law of this State.” DEL. CODE ANN. tit. 8, § 101(b) (2006). Similarly, the New York Business Corporation Law states that, “[a] corporation may be formed . . . for any lawful business purpose or purposes.” N.Y. BUS. CORP. LAW § 201(a) (McKinney 2010). And the California Corporations Code states that “any corporation . . . may engage in any business activity.” CAL. CORP. CODE § 206 (West 2012).

in fact it potentially brings about a worsening of corporate conduct because it crowds out other social and moral behavior.

Second, to the extent one cares about encouraging creativity and intrinsically good behavior in executives, PFP actually fails in this regard.²¹⁰ As noted in the Morgan Stanley report on executive compensation, while “[p]ay-for-performance sensitivity has significantly increased over time, improving the alignment of CEOs with shareholders, [it] also appears to have had unintended consequences,” such as incentivizing executives to manipulate earnings.²¹¹

Third, PFP may unwittingly encourage a kind of selective sorting among potential CEOs. Individuals who are attracted to simply meeting monetary rewards will be attracted to becoming a CEO, while those who resist this type of reductionist view of their work and their ethics may be driven to seek another position. The snide rebuttal to this point is that the people who may be deterred by PFP are surely in the minority and that if executives are not outcome and profit driven, then maybe they have missed their calling. While there may be some truth to these rebuttals, it is prudent to think through the ramifications of a compensation system that is predominantly focused on monetary rewards for achieving financial metrics, but does not necessarily reward expressions of social and moral actions. What message does such a system send to executives? Who are the future business leaders who are likely to be attracted to such a system? Will executives who want to do “good” feel like their hands are tied by a culture that is obsessed with financial metrics?

The resignation in early 2012 of Goldman Sachs Executive Greg Smith may provide a case in point.²¹² In his announced resignation, Mr. Smith indicated that his main gripe was that the firm cared more about making money from its clients than serving the clients’ interests, and that the environment at Goldman was “as toxic and destructive as [he had] ever seen it.”²¹³ Whether Mr. Smith was *in fact* inclined to behave prosocially in this self-described “toxic environment” is unknown, but to the extent that he was so inclined based on his assertions, Goldman’s culture would have crowded out and suppressed these motivations.

210. This second point is related, but separate from the first. The first point takes as given the starting assumption that corporate managers are greedy and selfish, and thus the best we can do is to try to bring about better *outcomes* by tying their pay to performance. In contrast, the second point is more optimistic and is concerned with how we can inculcate better *internal/intrinsic* values in corporate managers.

211. See Faulkender et al., *supra* note 1, at 117.

212. See Greg Smith, Op-Ed., *Why I Am Leaving Goldman Sachs*, N.Y. TIMES, Mar. 14, 2012, at A27.

213. *Id.*

The crowding out phenomenon signals that law needs to be extremely cautious in how we design systems of reward and motivation in the executive compensation field. If law is concerned with inculcating better intrinsic values in corporate managers, pay for economic performance should be treated with a healthy dose of skepticism because it has the potential to crowd out desirable social and moral behavior in corporate managers.

In a book entitled *Cultivating Conscience: How Good Laws Make Good People*, corporate law scholar Lynn Stout addresses the danger of building laws based on a selfish, rational choice, utility focused, economic model of human beings.²¹⁴ As Professor Stout states, “[l]argely missing from” the debate on “‘incentives’ and ‘accountability’ is any serious discussion of the possibility that we might encourage or discourage particular behaviors by appealing not to selfishness, but instead to the force of conscience.”²¹⁵

Policy-makers can minimize the occurrence of “crowding out” in two ways. First, shareholders, corporations, the markets, and legal policy makers should view PFP merely as a heuristic for judging behavior, not as a substitute for good behavior itself. Second, as discussed in Part IV *infra*, instead of defining “performance” in terms of financial performance, the definition of performance should be expanded to include non-financial metrics. Third, instead of relying heavily on PFP to rein in any rogue executive behavior, the law should realize that social and moral forces, such as ego and reputation, may also serve as powerful deterrents against objectionable executive behavior.²¹⁶

IV. BEYOND AN ECONOMIC CONCEPTION OF PFP— LEVERAGING BEHAVIORAL DYNAMICS

In order to achieve the oft-recited tripartite objectives of executive compensation—to attract, retain and motivate top executives to align their interests with those of the shareholders—executive compensation needs to be perceived as a human concern and not an economic one. While PFP can and should play a role in compensating executives, if the stated objective of executive compensation design is broader than simply earning shareholder returns, then care should be taken to ensure that the compensation package and our corporate culture are not skewed toward *ex ante* financial incentives as the sole yardstick for reward.

214. STOUT, *supra* note 18, at 20-22.

215. *Id.* at 5.

216. *Cf. id.* at 5, 8.

Companies recognize that success requires more than focusing on attaining financial metrics and similarly, unlike the optimal contracting theory would have us believe, executive compensation design serves other purposes beyond aligning executive interest to those of shareholders. For instance, in its 2010 DEF 14A, Whole Foods Market, Inc. stated that their intention was “to set total executive cash compensation sufficiently high to attract and retain a strong motivated leadership team, but not so high that it creates a negative perception with our other *stakeholders*.”²¹⁷ In a similar vein, in March 2012 the Hay Group revealed the “core business practices” that distinguished the “World’s Most Admired Companies” from others—simply aligning executive interest to shareholder interest was not on the list.²¹⁸ According to the Hay Group’s research, the four critical factors common to these companies’ success were: the ability to execute strategy; building structures and processes that sustain long-term performance; successfully cultivating human capital and an environment in which employees can thrive; and placing a high value on leadership and talent.²¹⁹

Successfully designing an executive compensation program to achieve these various goals is a delicate and complex process. Among other things, it requires: leaving latitude for boards and management to exercise sound business discretion; leaving room for boards and management to take on risks with the hope of generating returns; trust in the business acumen and business integrity of the board and management team; a clear and realistic understanding of firm strategy and suitable metrics by which attainment of the strategy can be measured; and an acceptance that neither shareholders nor management can predict or control all aspects of the future.

The balance of Part IV proposes two categories of solutions that draw on the behavioral insights developed in Part III. First, are solutions that relate to the compensation model itself, and second, are solutions that relate to the institutional and cultural framework within which the model operates.

217. Whole Foods, Definitive Proxy Statement (Form DEF 14A) 17 (Jan. 25, 2010) (emphasis added), available at http://www.sec.gov/Archives/edgar/data/865436/000120677410000109/wholefoods_def14a.htm.

218. Hay Group Reveals “Best Practices” of the FORTUNE Magazine World’s Most Admired Companies, HAY GROUP (Mar. 5, 2012), <http://www.haygroup.com/in/press/Details.aspx?ID=33073>.

219. *Id.*

A. *The Compensation Model—Accounting for Behavioral Dynamics*

As discussed in Part III, there are various behavioral dynamics that can impact how effective a given compensation contract is at incentivizing executives to act in the best interests of the firm, while at the same time being an effective tool for attracting and retaining the executive. In structuring the optimal compensation mix, boards and their compensation consultants utilize various valuation models to assess the incentive effects of a compensation plan. Many of these models use market-based valuation formulas and look at value from the point of view of shareholders, which, as one can imagine, may be different from that of managers, especially because vis-à-vis the firm, executives may not be able to diversify their risk to the same extent as shareholders.²²⁰ In addition, compensation models that adopt a shareholder perspective to design incentive contracts for executives, often times fail to account for the value of the contract from the executive's perspective.

1. Shift from Shareholder Perspective Model to Manager Perspective Model

The first step in my proposed solution is that any valuation of the incentive effects of a compensation package must be informed by a valuation model that incorporates the perspective of the executive. One such valuation framework was developed by Professors Lambert, Larcker, and Verrecchia in a 1991 paper in the *Journal of Accounting Research*.²²¹ The professors found that market-based valuation models, such as the Black-Scholes option-pricing model, did not adequately capture the value that a manager placed on his or her compensation contract and that “[i]n particular, the incentive properties of executive stock options are not simple extensions of the comparative statics associated with the Black-Scholes option-pricing model.”²²² Adopting a compensation model that values a compensation contract from an executive's perspective would be the first step towards building in several of the behavioral insights discussed in Part III, because adopting such a model involves a fundamental shift in focus to better determine how the executive's actions affect *their* valuation of *their* compensation.

220. See Lambert et al., *supra* note 7, at 129-30.

221. See *id.* at 131.

222. See *id.* at 145.

2. Modeling for Behavioral Dynamics

In addition to a proposed shift towards executive-centered valuation models, the second part of my proposed solution is that several of the behavioral dynamics discussed in Part III could be built into the compensation model. For example, modeling for hyperbolic discounting instead of exponential discounting is already widely being done in behavioral circles and by some economists.²²³ One way that has been proposed by economists to model for hyperbolic discounting is to model it as “an *intra*-personal game among different temporal selves,” so that for the sake of the model today’s “self” would be modeled as a distinct player from tomorrow’s “self.”²²⁴ This analytic framework has been replicated in studies involving dynamically inconsistent preferences over time, and provides a promising starting point for building in a hyperbolic discounting function into compensation models. Moreover, as discussed above, researchers already build individual employee characteristics into compensation models. The most frequent one being the individual level of risk aversion, but other traits such as levels of wealth can be built into compensation models with relative ease.

3. Expanded Definition of “Performance”

Finally, a third proposal on how to incorporate behavioral insights into compensation models is to allow for the inclusion of a broader definition of “performance.” As mentioned, currently “performance” is typically defined in terms of financial metrics, such as Total Shareholder Return (“TSR”) or stock price. One way to minimize the crowding out effect is to broaden the definition of what “performance” will be rewarded with pay to include non-financial qualitative measures of value such as environmental and social criteria, customer satisfaction measures, and sustainability metrics.²²⁵ Including such non-financial measures of performance in incentive compensation would encourage executives to look beyond merely meeting the proverbial “bottom line” and instead aiming to achieve these other measures, which would lead to more value for the firm and its stakeholders in the long-run.

Several companies already include non-financial measures of performance in compensation models, but it is unclear how widespread a practice this is, and even for those companies that do include non-financial components in their incentive compensation model expressly, these components often comprise a small fraction of the executive’s

223. See, e.g., Laibson, *supra* note 87, at 2-3.

224. *Id.* at 3.

225. Various metrics abound in both the profit and for-profit sectors for measuring non-financial success.

overall compensation.²²⁶ From a behavioral perspective, making an executive's pay dependent in part on non-financial metrics should be encouraged because it would help ameliorate the crowding-out concerns discussed in Part III.D. Moreover, including non-financial measures of performance in an executive's compensation contract is a practice that should be encouraged, and both implemented and adopted on a wider scale, especially for firms which value growth and sustainability over the long-term.²²⁷ A 2012 study found that firms which placed a premium on sustainability (what the authors referred to as "High Sustainability" companies) were more likely to include sustainability metrics as measures of performance in top executive incentives, and that these High Sustainability companies significantly exceeded the performance of their counterparts in terms of the stock market and accounting measures.²²⁸

Including non-financial performance in compensation models has several other practical benefits. First, making an executive's pay contingent on achieving a non-financial metric directly incentivizes the executive to remain informed about the status of the company's operations in the area that the non-financial metric seeks to measure. For example, if the metric is targeted at capturing environmental efforts in re-forestation, an executive who may otherwise have been content to get a report on reforestation efforts is now incentivized to proactively act to ensure that the company's re-forestation policies are being implemented.

Second, linking executive pay to key non-financial performance indicators helps align the executive's mandate with the firm's mission. The mission of most firms is not as simple and myopic as maximizing profit. Instead, corporations tend to have a more multi-purpose mission and expression of their value proposition to society and their investors. For example, at Intel, part of its mission and global strategy is to "[c]are for our people and our planet, and inspire the next generation."²²⁹ To measure if they are fulfilling this mission requires more than merely hitting their TSR or stock price targets. One way that Intel attempts to encourage management to fulfill this mission is by linking a portion of managers' bonuses to environmental metrics.²³⁰ According to Intel, tying

226. Cf. Robert C. Eccles et al., *The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance* 10 n.10 (Nat'l Bureau of Econ. Research, Working Paper No. 17950, 2012), available at <http://www.nber.org/papers/w17950.pdf>.

227. *See id.* at 12.

228. *Id.* at 1.

229. *See* INTEL, 2010 CORPORATE RESPONSIBILITY REPORT 3 (2011) (internal quotation marks omitted), available at http://csrreportbuilder.intel.com/PDFFiles/CSR_2010_Full-Report.pdf.

230. *Id.* at 35.

pay to environmental measures of performance helps managers focus on the importance of achieving Intel's environmental objectives.²³¹

A third benefit of including non-financial measures of performance as part of the calculus in designing executive pay is that financial measures may not adequately capture the range of benefits that accrue from the executive's efforts, and, in effect, a portion of the executive's efforts goes unrewarded. Adopting non-financial metrics could help capture some of these shadow benefits and thus appropriately reward the executive for actions that create value for the company in key areas such as environmental and social value initiatives.

In addition to changing the inputs that go into the compensation model, a behavioral perspective points to efforts to create an institutional and organizational culture supportive of a PFP model that treats the frailties of human decision-making as a reality that needs to be wrestled with, rather than one that should be ignored. The balance of Part IV contemplates three distinct ways in which such a culture could be inculcated.

B. *The Twin Pillars of Shaming and Reputation*

Studies on the roles of "reputation" and "shaming" as behavior modifiers provide one potential avenue for addressing concerns about executive greed and rent extraction, as well as responding to the behavioral implications of herding, anchoring and adjustment, and crowding out, discussed in Part III.²³² The Oxford dictionary defines "reputation" as the beliefs or opinions that are generally held about someone or something.²³³ Similarly, "shaming" is defined as exposing a wrong with the objective or the effect of inflicting psychological and social costs on a wrongdoer by raising their feelings of guilt and remorse.²³⁴ Shaming differs from traditional legal sanctions such as imprisonment or fines, in that it relies on a network of mutual social understandings to be effective.²³⁵ Shaming techniques have been

231. *Id.*

232. See, e.g., Christo Karuna, CEO Reputation and Internal Corporate Governance 6-9 (Oct. 2009) (unpublished paper), available at <http://www.kellogg.northwestern.edu/accounting/papers/karuna.pdf>.

233. OXFORD ENGLISH DICTIONARY 678 (2d ed. 1989).

234. See Note, *Shame, Stigma and Crime: Evaluating the Efficacy of Shaming Sanctions in Criminal Law*, 116 HARV. L. REV. 2186, 2187 (2003).

235. Advocates of shaming penalties point out that they are cheap to administer plus they also point to their effectiveness. A Texas district court judge, Ted Poe, who is known for his deployment of shaming penalties articulated his reasons for using shaming as follows: "a little shame goes a long way. Some folks say everyone should have high self-esteem, but that's not the real world. Sometimes people should feel bad." Amitai Etzioni, *Back to the Pillory?*, 68 AM. SCHOLAR 43, 46-

employed in several other areas of law and policy, such as tax (several states now post the names of tax delinquents on a publicly accessible website), criminal law (courts force offenders to take out billboard ads proclaiming their wrong and their remorse), and land use regulation.²³⁶

The importance of reputation in the corporate world is widely documented by practitioners and academics alike.²³⁷ A 2003 study by a noted reputation strategist concluded that CEO reputation counts for up to fifty percent of a corporation's reputation and has a significant influence on investors' decisions and stock analysts' recommendations.²³⁸ In addition, a direct indication of the extent to which reputation factors into a corporation's risk management is the appearance of reputational risk descriptions in public corporations' risk factor sections of their disclosure documents.

The SEC's enhanced CD&A rules, required say on pay votes, and proposed internal pay equity rules all serve as potential shaming mechanisms—they allow the public to see how compensation has been set and the public then has the tools to shame that company or CEO. In 2004, Professors Bebchuk and Fried posited that the market was not a sufficient antidote to rogue executive compensation schemes because there was no transparency about the executive compensation process, and executives and firms could easily engage in a game of hide-the-ball.²³⁹ With the implementation of the enhanced CD&A rules and required say on pay votes, the concerns expressed by Bebchuk and Fried are significantly diminished, and now with the enhanced transparency, the market should be able to shame rogue executives if it so desires.

Shaming is already used in varying degrees in the corporate world. For example, shareholder activists often take out full page *Wall Street Journal* advertisements intended to air the dirty laundry of their targets.

47 (1999) (internal quotation marks omitted). On the other hand, critics of shaming penalties argue that they are morally degrading, that use of shaming techniques may erode other socially valuable norms (such as dignity), that too much shaming actually has the inverse effect of not serving as a deterrent at all, and that some shaming techniques are illegal. See, e.g., Steven Tadelis, *The Power of Shame and the Rationality of Trust* 15-16 (U.C. Berkeley, Haas Sch. of Bus. Working Paper, Mar. 2, 2011), available at http://faculty.haas.berkeley.edu/stadelis/shame_trust_030111.pdf; see also Toni M. Massaro, *Shame, Culture and American Criminal Law*, 89 MICH. L. REV. 1880, 1917 (1991) (arguing that shaming is not an effective method of punishment in criminal law today).

236. See, e.g., CONN. GEN. STAT. ANN. § 14-33 (West 2012).

237. See, e.g., Karuna, *supra* note 232, at 6-9.

238. See Press Release, Betsy Turenne, Burson-Marsteller, Non-Governmental Organizations Seek More Candor in Corporate Social Responsibility Reports, available at <http://www.burson-marsteller.com/newsroom/lists/PressReleases/DispForm.aspx?ID=494&nodename=Press%20Releases%20Archive>; see also Leslie Gains-Ross, *CEO Reputation: A Key Factor in Shareholder Value*, 3 CORP. REPUTATION REV. 366, 366-67 (2000).

239. See BEBCHUK & FRIED, *supra* note 4, at 53-54, 58.

Similarly, the financial press often publishes list of wrong-doers (the so-called “rosters of shame”), and courts sometimes employ shaming techniques with great effect to draw public attention to particularly egregious acts. In 2009, for example, a N.Y. federal judge ordered a former pharmaceutical executive convicted of making false statements to write a book about his experiences relating to the case.²⁴⁰ News outlets and the blogosphere took note. Similarly, in the more recent case of *In re El Paso Corp. Shareholder Litigation*,²⁴¹ Chancellor Leo Strine writing for the Delaware Chancery Court went to great lengths to tongue lash Goldman Sachs and the CEO of El Paso for their roles in the sale of the company, holding them up as examples of the type of behavior that will not be looked on favorably by the courts.²⁴²

One potential drawback to the efficacy of a shaming technique in executive compensation is the de-individuation process discussed in Part III.C. If, as suggested in Part III.C, firms and executives are herding in the manner in which they set executive compensation, then an attempt to use shaming techniques may be blunted if all firms in the given herd are adopting roughly the same compensation mix then each firm may feel a sense of collective security and not feel pressured into changing their compensation process. The use of shaming as a norm-enforcing mechanism should not, however, be overlooked. The utilization of shaming techniques to incentivize executives to make “good” decisions would catch the worst offenders. In addition, it has the advantage of drawing on existing techniques that shareholders, customers, the media, and the courts are already using, without the need for an intensive top-down regulatory approach.

C. *The Role of Diversity*

A long-standing concern in corporate law is the optimal mix in the composition of the board of directors—both in terms of inside and outside directors, and along other matrices such as the gender and racial diversity of the board.²⁴³ Enhancing diversity in the boardroom could

240. Natasha Singer, *Judge Orders Former Bristol-Meyers Executive to Write Book*, N.Y. TIMES, June 9, 2009, at B3.

241. 41 A.3d 432 (Del. Ch. 2012).

242. *See id.* at 437-47.

243. *See generally* Lisa Fairfax, *The Bottom Line on Board Diversity: A Cost Benefit Analysis of the Business Rationales for Diversity on Corporate Boards*, 2005 WIS. L. REV. 795 (“This Article critically examines the viability of these business rationales for diversity”) [hereinafter Fairfax, *Bottom Line*]; Lisa M. Fairfax, *Board Diversity Revisited: New Rationale, Same Old Story?*, 89 N.C. L. REV. 856 (2011) [hereinafter Fairfax, *Board Diversity*] (arguing that rationalizing board diversity on business terms has not resulted in greater board diversity).

have the additional advantage of helping to diminish the prevalence of the optimism effect, anchoring and adjustment, and the herding effect in the executive compensation space.²⁴⁴

At least two data points offer support for this position. First, the corporate law literature on the dynamics of inside directors versus outside directors offers two reasons to believe that in general outside directors will be less susceptible to the optimism effect than their inside counterparts in the context of making firm decisions.²⁴⁵ The first reason is that compared to inside directors, outside directors' view of themselves and their worth are less tied up with or affected by the fortunes of the firm.²⁴⁶ The second reason is that, compared to inside directors, the process of selecting outside directors is less likely to be influenced by whether the outside director is overly optimistic about the firm.²⁴⁷ Now while diversity obviously does not need to be achieved by looking to only outside directors, what the literature on inside-outside director dynamics shows in terms of a broader principle is that bringing in a diverse mix of views, interests, motivations, objectives, etc., reduces the likelihood for optimism bias and may lead to more realistic decisions.

Second, and more generally speaking, a large body of empirical evidence shows that error judgments often result when like-minded people undertake decision-making.²⁴⁸ People who share similar interests and similar views typically make decisions that reflect their pre-deliberation tendencies.²⁴⁹ The more these pre-deliberation tendencies align, the more likely that the resulting decision may be subject to judgments of error. In the context of executive compensation, behavioral science predicts that boards and executives would tend to be optimistic about their future, which in turn leads them to overestimate their chances of success and set unrealistic future metrics that may be improbable to achieve.²⁵⁰ On the other hand, if the board were diverse, i.e., there truly was a diverse range of views, then the presence of diverse views in the

244. For the purposes of this Article, "diversity" refers to diversity in board members' viewpoints, which may or may not correlate to directors' "diversity" in the more traditional sense: race, ethnicity, gender, etc.

245. See David Langevoort, *The Human Nature of Corporate Boards: Law Norms and the Unintended Consequences of Independence and Accountability*, 89 GEO. L.J. 797, 803, 809-10 (2001).

246. See *id.* at 803.

247. See *id.* at 809-10.

248. See Cass R. Sunstein, *Hazardous Heuristics*, 70 U. CHI. L. REV. 751, 759-60 (2003).

249. See *id.* at 759.

250. See discussion of optimism bias in Part III.D.1, *supra*. More empirical work needs to be done in this area. For example, how many executives are typically reaching the long-term targets set out in their compensation arrangements?

board room should infuse other considerations and perspectives into the discussion, and should act as a check on a deliberative process that would otherwise result in optimistic, but highly unrealistic compensation arrangements.

In addition, beyond tempering potential optimism bias, board diversity could also mediate against the herding effect, and anchoring and adjustment effects discussed in Part III, *supra*. The more diverse the decision-making group, the less the chance of pre-deliberation homogenization, hence the lower the chance for anchoring and adjustment, and also the lower the chance for irrational herding.

The extent to which diversity can temper behavioral biases is largely unexplored in the empirical literature, but it is an area that merits exploration particularly because it links to the broader discussions in corporate circles about the value of a diverse board.²⁵¹ In terms of operationalizing diversity as a means of tempering the realities of how humans make decisions, the elegance of it is that there is not much work to be done in the sense that diversity initiatives and diversity as a value are already beginning to take hold in the corporate space.

In terms of legal initiatives, in December 2009, the SEC approved a rule requiring public companies to provide disclosure of whether and to what extent a corporation's nominating committee considers diversity when nominating candidates to the corporation's board.²⁵² The rule became effective on February 28, 2010.²⁵³ Under the rule corporations must disclose "whether, and if so how, the nominating committee . . . considers diversity in identifying nominees for director."²⁵⁴ If the board or nominating committee has "a policy with regard to the consideration of diversity in identifying director nominees," the final rule requires the company to disclose "how this policy is implemented" and "how the nominating committee (or the board) assesses the effectiveness of its policy."²⁵⁵ The SEC's adoption of the rule and the comments received by the SEC during the notice and comment period, reflect that the SEC and a significant number of corporate players appear to place a high premium on achieving diversity in their organization and in their board rooms.²⁵⁶

Interestingly enough, however, when it comes to diversity, the United States (both in terms of actual law and corporate culture) has

251. See Fairfax, *Bottom Line*, *supra* note 243, at 810-11.

252. See 17 C.F.R. § 229.407(c)(2)(vi) (2010).

253. *Id.* 249.

254. *Id.* 229.407(c)(2)(vi).

255. *Id.*

256. See Fairfax, *Board Diversity*, *supra* note 243, at 860.

been more tepid in response when compared to other countries. For example, Norway law requires that public shareholder-owned corporations (or “ASAs,” as referred to in Norway) have an average of at least forty percent women on their board or face dissolution.²⁵⁷ Similarly, a 2011 study found that “the U.S. . . . lags behind countries such as Bulgaria, Latvia, and South Africa in board representation by women.”²⁵⁸ Indeed, an empirical study on the presence of women and people of color on U.S. corporate boards reveals that such diversity has remained relatively unchanged over the past several years.²⁵⁹ According to the study, the number of Fortune 1000 companies with at least one person of color on their board grew 2%, from 76% to 78% between 2005 and 2007.²⁶⁰ Similarly, from 2004 to 2009, the number of S&P 500 companies with at least one female director grew a mere 1%, from 88% to 89% over the five-year period.²⁶¹ What these studies suggest is that representation of the groups studied has become fairly stagnant, or as one author put it, has “hit a barrier.”²⁶²

In terms of this Article and corporate law in general, what this means is that diversity as a principle is yet to be fully operationalized on a broad scale, and hence the potential benefits of board diversity have yet to be truly realized. This Article posits that in addition to adding value in the various ways that others have described, the continued inculcation of diversity as a principle and as a norm in the corporate space could serve as an antidote to several of the behavioral outcomes discussed in Part III.

D. Countering Problems of Inter-Temporal Discounting and Motivation with Endowment and Framing

The behavioral studies on inter-temporal discounting and intrinsic motivation discussed in Part III show that when rewards occur too far in the future they may not serve as sufficient motivation for the desired action; that people tend to be risk averse and that people tend to prefer an improving sequence over a declining one. Each of these observations

257. See Public Limited Liability Companies Act, Norges Lov, No. 45, 13.6.1997.

258. Sylvia Ann Hewlett, *Women on Boards: America Is Falling Behind*, HARV. BUS. REV. BLOG NETWORK (May 3, 2011, 3:49 PM), http://blogs.hbr.org/hbr/hewlett/2011/05/women_on_boards_america.html.

259. KORN/FERRY INST., 34TH ANNUAL BOARD OF DIRECTORS STUDY 6-7 (on file with *Hofstra Law Review*).

260. See *id.* at 7.

261. See SPENCER STUART, 2009 SPENCER STUART BOARD INDEX 8, 15 (2009), available at <http://content.spencerstuart.com/sswebsite/pdf/lib/SSBI2009.pdf>.

262. KORN/FERRY INST., *supra* note 259, at 7.

and findings from studies on the endowment effect and framing can be used to enhance the effectiveness of executive compensation contracts to better motivate executives to pursue the desired action over a given series of time frames.

1. Endowment Effect

The endowment effect captures the idea that people value an item more once they are in possession of that item.²⁶³ To illustrate, in 1981 the originator of the endowment effect, Richard Thaler, conducted an experiment in which he gave Cornell University mugs to half of the students in a class and none to the other half.²⁶⁴ He then asked the class to bargain and trade, but virtually no trading occurred because the price demanded by those with the mugs far exceeded the price those without the mugs were willing to pay for one.²⁶⁵ Thaler's experiment has since been replicated several times over, all with the same result people attach more value to items that they already possess.²⁶⁶

Two solutions currently offered as alternative ways to design compensation contracts are solutions to structure compensation based on long-term escrow accounts and solutions to utilize only restricted stock or restricted stock options in the incentive portion of a compensation package—both solutions would implicitly leverage the findings on endowment effect.²⁶⁷

With respect to using long-term escrow accounts, Professor Edmans et al. proposed a compensation system that would escrow compensation for a set period of years continuing into the executive's retirement.²⁶⁸ An important feature of their proposed design is that the executive would only be able to withdraw a percentage of the escrow account in each period.²⁶⁹ As the authors noted, among other things this feature ensures "that the CEO has sufficient equity in the future to induce effort."²⁷⁰ One additional dimension that could be added on to Professor Edmans' solution, which would heighten the endowment effect, is to consider

263. See, e.g., George Loewenstein & Samuel Issacharoff, *Source Dependence in the Valuation of Objects*, 7 J. BEHAVIORAL DECISION MAKING 157, 158 (1994); see also David Dunning et al., *Ecocentric Empathy Gaps in Social Interaction and Exchange*, in 18 ADVANCES IN GROUP PROCESSES 65, 73 (Shane R. Thye et al. eds., 2001).

264. Dunning et al., *supra* note 263, at 73.

265. See *id.*

266. See, e.g., Loewenstein & Issacharoff, *supra* note 263, at 159, 165; see also Dunning et al., *supra* note 263, at 73-74.

267. See Bhagat & Romano, *supra* note 77, at 361, 363; Edmans et al., *supra* note 77, at 1621-23.

268. See Edmans et al., *supra* note 77, at 1605, 1634.

269. See *id.* at 1606.

270. *Id.*

subtracting from cash deposits in the escrow account if performance falls below specified targets.²⁷¹

Similarly, in a 2009 essay, Professors Bhagat and Romano argued that “incentive compensation plans should consist of only restricted stock and restricted stock options.”²⁷² These would be restricted in that they could not be sold, or in the case of the options, exercised for a given number of years.²⁷³ One of the benefits of their proposal is that the restricted stock and restricted stock options have a “natural ‘clawback’ feature” because the value to the executives will naturally “dissipate[] as the value of the firm’s shares decline.”²⁷⁴ Because both sets of solutions rely on the threat of taking a benefit away both implicitly utilize the endowment effect, and thus both are highly beneficial from a behavioral dynamics perspective.

2. Framing

The observation that people tend to be risk averse would suggest that between two equal choices, the choice that an executive will make is to some extent dependent on whether the choice is framed as a loss or a gain. The idea that people’s decision to choose Option A or Option B is affected by the way the two options are framed, where Option A and Option B represent two equal choices, has been termed the “framing effect.”²⁷⁵ For example, a set of experiments on framing and the framing effect performed by psychologists Amos Tversky and Daniel Kahneman, demonstrated that changes in the formulation of mathematically identical decision problems in terms of loss or gain caused significant shifts of preference.²⁷⁶ Tversky and Kahneman defined a “decision problem” in terms of “the acts or options among which one must choose, the possible outcomes or consequences of these acts, and the contingencies or conditional probabilities that relate outcomes to acts.”²⁷⁷ Tversky and Kahneman posited that decision choices framed as gains will often lead to risk averse outcome preferences, while choices framed as losses will often lead to risk taking outcome preferences.²⁷⁸ In sum, the way the

271. I am grateful to Professor Bill Wang for prompting me to consider this solution.

272. See Bhagat & Romano, *supra* note 77, at 363 (emphasis omitted).

273. *Id.*

274. *Id.* at 367.

275. See, e.g., Amos Tversky & Daniel Kahneman, *The Framing of Decisions and Psychology of Choice*, 211 SCI. 453, 453 (1981); see also David A. Snow & Robert D. Benford, *Ideology, Frame Resonance and Participant Mobilization*, 1 INT’L SOC. MOVEMENT RES. 197, 198 (1988).

276. Tversky & Kahneman, *supra* note 275, at 453.

277. *Id.*

278. *Id.*

problem was presented had a systematic effect on how people perceived the problem and responded to the problem.

Borrowing insights from the framing literature and applying them in the executive compensation space suggests that we could enhance our chances of incentivizing executive behavior if we are cognizant of the choice of the decision frame that we employ in negotiating and drafting the compensation contract. This observation is supported by a recent doctoral dissertation in which the author studied the effects of framing in compensation contracts in general (not necessarily executive compensation contracts).²⁷⁹ The study observed that people tended to prefer contracts that were framed as “bonuses” over ones that were framed as “penalties,” *but* those that were framed as penalties resulted in greater exertion of “effort” on the part of the recipient than those that were framed as “bonuses.”²⁸⁰ While it does not appear that this study has been replicated, if the results of the study hold true this would further underscore the need for care in designing an executive’s compensation contract with a careful mix of loss and gain components, and it would also suggest that while executives may prefer *ex ante* contracts framed as gains or bonuses, over the life of the contract incentives framed as losses or penalties be the better motivator for “good” executive behavior. Moreover, building on the insights from the discussion on sequencing effects in Part III, care should also be taken in the contract design to avoid lumping too many incidents of losses or penalties together, and the end result of the contract should be framed in terms of a gain or bonus rather than a loss or penalty.

E. Strategic Use of Perquisites and Non-Monetary Rewards

Finally, as discussed in Part III, a large part of the problem with PFP is that it encourages a corporate culture that is overwhelmingly focused on achieving financial goals, which could lead to both outcome bias, and a “crowding out” of other intrinsic motivations and behavioral qualities such as integrity, trustworthiness, and cooperativeness. One solution to diminish the effects of outcome bias and “crowding out” is to reassess the use of non-monetary rewards in an executive’s compensation package.

279. See generally Alisa Gabrielle Brink, *The Effects of Risk Preference and Loss Aversion on Individual Behavior Under Bonus, Penalty, and Combined Contract Frames* (Apr. 4, 2008) (unpublished Ph.D. dissertation, Florida State University), available at <http://etd.lib.fsu.edu/theses/submitted/etd-04112008-185426/unrestricted/BrinkADissertation.pdf>.

280. See *id.* at 50.

In general, non-monetary rewards can be broken down into two categories—perquisites and other non-monetary rewards. As discussed in Part II, perquisites or “perks” constitute additional compensation for senior executives which are not available to most salaried employees. These include reserved parking spaces, use of the company jet, and relocation expenditures. Perks are a form of non-monetary reward and most perks are status-based—meaning that by reason of the executive’s position the executive becomes entitled to use the company jet, to have the special parking space, to receive relocation expenditures, etc. There are, however, other forms of non-monetary rewards, which are contingent not on status, but on the recipient actually doing something to earn the reward (what I shall call “earned non-monetary rewards”). This latter category includes non-monetary rewards such as plaques (for example, an “employee of the month” plaque), trophies, certificates, public acknowledgement at the company’s retreat, and any other non-monetary gesture that is bestowed on the executive to express appreciation and/or gratitude for something the executive did. There are at least two distinct advantages of earned non-monetary rewards over perks (non-monetary rewards based on status), which make them particularly suited for addressing several of the behavioral observations highlighted in Part III.

First, earned non-monetary rewards may actually serve as an incentive for the executive to act in a prosocial way because the receipt of such rewards is contingent on the executive having to earn the reward by doing something that others value, as opposed to being status-based.

Second, the act that gives rise to the earned non-monetary rewards typically precedes the decision to give the reward, such that knowledge of the reward occurs *ex post* after the executive has already acted. From a behavioral science perspective an *ex post* reward decision is preferable to the current *ex ante* structure of PFP, because it does not put the parties in a position where they are forced to commit judgment errors about future value, thus lessening the chance for optimism bias, sequencing bias, and anchoring and adjustment. The drawback to *ex post* rewards is that unless the executive has reason to expect that there might be a reward based on some other signal, such as prior experience, the executive may be less incentivized to achieve a particular goal.

The argument here is not that we should replace financial rewards with non-monetary rewards (because for obvious reasons this would not be desirable), but that we should reassess how we view and use non-monetary rewards, particularly earned non-monetary rewards, in light of the objective that executive compensation should incentivize executives to act in the long-term interest of others, i.e., the corporation and its

shareholders. In particular, if the concept of acting in the long-term interest of the corporation and its shareholders extends beyond mere long-term financial interest, then the heavy reliance on financial targets to motivate executives risks crowding out other behaviors and instincts that could bring a more sustainable vision of what “long-term interest” means.

Drawing on the behavioral insights developed in Part III, the proposals discussed above in Part IV provide specific ways in which we can improve upon the PFP paradigm, not overthrow it. As this Part proposes, this can be done by focusing on the behavioral aspects of human decision-making and motivation, *in addition to* contemplating the economics of the compensation contract.

The potential drawbacks to the proposals outlined in this Part are three-fold. First, implementing some of the proposals, such as modeling for specific executive traits, may result in significant transaction costs that make implementation infeasible. While modeling for specific executive traits does add a layer of complexity to the compensation process, as discussed in Part III, models already exist for capturing individual characteristics. Second, an attempt to address one behavioral dynamic may actually have a cross-cutting effect by unwittingly encouraging another behavioral dynamic. For example, as discussed in Part III, the efficacy of shaming techniques may be limited if in fact firms are herding. Similarly, a switch to more *ex post* rewards could actually enhance the outcome bias concerns discussed in Part III. Third, the effects of these proposals will be difficult to quantify and measure. Difficulty, however, does not imply impossibility. Empiricists and behavioral researchers constantly develop test suites and models to study the relationship between an observed behavior pattern and a change in an external factor. The exercise here should be no different.

V. CONCLUSION

The push to implement PFP in executive compensation contracts was in response to perceived crises of greed and excess in the corporate world. While a lot of attention was spent developing the *economic* case for PFP, the *human* case which considers how humans actually make decisions, are motivated, and value rewards, was ignored and not robustly developed.

In other areas such as health care, education, and mid-manager business settings, PFP is on the wane. Interestingly enough however, as PFP has started a descent in other areas, it is experiencing a continued normative ascent in the executive compensation space. Choices about the

objectives and the design of executive compensation, link to other critical policy and doctrinal questions. What type of business culture do we create by encouraging executives to measure their worth against financial yardsticks? What types of people do we incentivize to become executives by creating such a system? What conception of the corporation does our choice of executive compensation design support and encourage? And, what does it mean to align the executive's interest with that of shareholders, given today's environment where many shareholders often act in ways that are antithetical to the best interest of the firm? In addition, the problem of designing compensation packages that incentivize executives to perform well invites us to consider two fundamental questions: (1) what definition should we ascribe to what it means to "perform well," and, relatedly, (2) what are the optimal incentives that encourage executives to perform well at the least cost to the company?

It has been close to two decades since PFP made its mark on the scene. In response to each crisis, the response of PFP proponents has been to focus on the economics of the relationship and insist that PFP performance itself is not the problem, but rather the way PFP has been implemented. While economics and care in implementation no doubt count, behavioral literature suggests that even if we were to achieve the impossible of designing contracts that *ex ante* tightly align the economics of pay and performance, these contracts will be unsatisfactory because they will be riddled with judgments of error and faulty assumptions about how human beings behave.

PFP as a sustainable and reliable model for executive compensation faces a choice—either continue to focus solely on the economics, which thus far has yielded questionable results, or expand its perspective to incorporate learning from other disciplines on how people are actually motivated, and how they make judgments that require decisions about a time in the future. By necessity, this involves wrestling with the behavioral dynamics that impact the decision-making process. To ignore these behavioral realities is to settle for less than the best result for the promise of PFP.
