Chapter 8

# ALIGNING INCENTIVES BY CAPPING BONUSES

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**Abstract**: A puzzling feature of many incentive compensation plans is the practice of capping bonuses above a certain threshold. While bonus caps are often justified on the grounds of keeping pay levels in check, it has also been argued that such caps can wreak havoc on a firm's incentive problems. In this paper, we study a setting in which bonus caps can actually help align incentives. When a CEO is impatient, she may be tempted to take a hardline stance with a privately-informed manager in project selection: if she places little weight on future flows, she is fixated on cost-cutting and curtailing budget padding. A bonus cap can soften the CEO's posture by inducing risk aversion and thus creating a preference for a middle ground. We show that this force can enable a judiciously chosen cap to achieve goal congruence between shareholders and a CEO.

Key words: Bonus caps, hierarchies, incentives

## 1. INTRODUCTION

The centerpiece of most incentive compensation plans is the use of performance bonuses as a "carrot" to encourage performance. Typically, however, incentive plans place a cap on bonuses once performance exceeds a certain threshold (ceiling). The prevalence of bonus caps is something of a puzzle.

Bonus caps have been criticized as having significant downsides. Limits on bonuses can encourage earnings management, foster a reluctance to take risks and enact change, and create a general atmosphere in which attention is diverted from undertaking value-enhancing activities to gaming the reward system (Healy 1985; Jensen 2003). The fatalistic view of bonus caps is summarized by Colvin (2001), who decrees "[w]hen a company caps

bonuses, something is wrong. Somehow leadership, organization, measurement, decision-making, and incentives are not aligned with shareholder value. If they were, limiting bonuses would be foolish (p. 58)."

In this paper, we revisit the issue of bonus caps and find that when a firm's hierarchy embeds several layers of incentive concerns, a pay ceiling can serve a useful role. While the conventional wisdom is that "purely linear compensation formulas provide no incentives to lie, or to withhold and distort information, or to game the system (Jensen 2003, p. 379)," this setting highlights a circumstance in which linear pay schemes introduce distortions. And, these distortions can be eliminated by introducing a simple bonus cap.

To elaborate, we consider a situation in which shareholders entrust a CEO with running a firm. The CEO, in turn, relies on a manager to assist in project implementation. The manager, having specific expertise and being proximate to operations, holds advance knowledge of the costs of a new project. In reporting this cost, the manager is tempted to overstate (pad) his budget in order to introduce some slack in the arrangement. In eliciting and utilizing the manager's cost report, the CEO's interests are also potentially misaligned from the shareholders. In particular, a common complaint is that CEOs exhibit a short-term orientation/impatience, reflected in the model by the CEO discounting at a rate that may be higher than the shareholders' discount rate.[38] The problem with an overly impatient CEO is that she is excessively aggressive in setting the bar for project approval, since she doesn't value the future cash inflows as much as do shareholders.

If the CEO's precise impatience level (her discount rate) is known to the shareholders, a linear contract can be used to achieve goal congruence. Unfortunately, the linear scheme loses its bite when the shareholders are not fully aware of the degree of CEO impatience; a scheme that works well at some discount rates is sure to fail at another discount rate. Our main result is that introducing a pay ceiling on the simple linear scheme, a bonus cap, restores the correct incentives for the CEO irrespective of the rate at which she discounts. A cap on the CEO's compensation serves as a cap on her aggressiveness.

Since the concern is the CEO undervaluing the project, it would appear that adding a cap to bonuses could only make matters worse. However, a

[38] The CEO's shorter horizon is consistent with such discounting. That is, suppose the CEO and shareholders both discount future cash flows at the rate r, but the manager retains his job in the next period only with probability p. Then the manager effectively discounts future compensation (associated with retaining his job) at a rate of $(1+r)/p - 1$, which is greater than r.