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Pay me now (and later): Pension benefit manipulation before plan freezes and executive retirement[☆]

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ABSTRACT

Large US firms modify top executives' compensation before pension-related events. Top executives receive one-time increases in pensionable earnings through higher annual bonuses one year before a plan freeze and one year before retirement. Firms also boost pension payouts by lowering plan discount rates when top executives are eligible to retire with lump-sum benefit distributions. Increases in executive pensions do not appear to be an attempt to improve managerial effort or retention and are more likely to occur at firms with poor corporate governance. These findings suggest that in some circumstances managers are able to extract rents through their pension plans.

1. Introduction

The high level of executive compensation at large public companies in the United States has long been the focus of policy debates. Compensation packages reflect outcomes from negotiations between top executives and board members, who have different incentives. Some of these incentives relate to managerial rent extraction, and others relate to shareholder value maximization via motivating and retaining managerial talent.[1] Most of these discussions focus

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[1] For example, Bertrand and Mullainathan (2001), Bebchuk and Fried (2004), and Morse, Nanda, and Seru (2011) argue that chief executive of-

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on equity-based compensation and on the link between pay and performance (Jensen and Murphy, 1990; Yermack, 1995; Edmans et al., 2009). Until recently, limited public data prevented in-depth empirical examination of executive pensions, which have been recognized for a long time as an important component of total compensation (Lazear, 1979; Lazear and Moore, 1984).[2]

In this study, we take advantage of recent improvements in the availability of pension data to investigate whether boards exercise discretion in determining pension benefit formula inputs for top executives in ways that advantage or harm shareholders. We show that boards increase pensionable earnings by temporarily raising bonuses the year before a pension plan is frozen or before a top executive retires. Firms also lower the discount rates used to compute lump-sum pension payouts in years in which top executives are eligible to retire and take such lump-sum payouts. These manipulations are more likely at firms with weak governance and do not appear to be related to incentive provision or managerial retention. Both of these findings are consistent with the managerial rent-seeking view of executive compensation. However, we also find that the compensation adjustments are made in a cost-effective manner, consistent with the shareholder value maximization view of executive compensation.

Most executive pensions are defined benefit (DB) pension plans, under which the sponsoring company promises to pay plan participants a fixed annual amount upon retirement. This amount is calculated as the product of a benefit factor (typically around 2%), the number of service years, and pensionable earnings (which include salaries and, almost always, annual bonuses and are typically averaged over the final three years of the employee's tenure). Suppose, for example, the benefit factor is 2%. An executive with an accumulated 25 years of service and pensionable earnings of \$1 million has an annual pension benefit of \$0.5 million $(= 0.02 \times 25 \times 1)$, which is 50% of pensionable earnings. Frequently, executives are permitted to take lump-sum payouts of their pension benefits upon retirement. The payout amount can be increased by using a lower discount rate to calculate the present value (PV) of future pension annuity payments.

In recent years, many companies have frozen their DB plans in anticipation of large long-run costs and increased contribution volatility. Once a plan is frozen, both the number of service years and the level of pensionable earnings stop growing (the so-called hard freeze). Thus, a plan participant's earned pension benefits remain at the same level for the rest of his or her tenure at the firm. In response, top executives can press the board to increase their pension benefits before the freeze to offset the loss of the expected benefit growth. One method for raising pension benefits ahead of a plan freeze is authorizing a one-time increase in pensionable earnings before the freeze takes effect.

Analyzing typical components of pensionable earnings one year before a plan freeze, we find no increase in salaries, but annual bonuses for top executives increase 18.5–29.3%, mainly due to the one-time awards of discretionary bonuses. Bonus increases and the resulting boosts in pension benefits averaged more than \$400,000 per chief executive officer (CEO), which helps preserve 90% of the pension value had the plan freezes not occurred.

Our initial analysis of the annual bonuses paid to executives before plan freezes includes controls for commonly known economic determinants such as firm performance, risk, complexity, and executive responsibility (Core, Haulthausen, and Larcker, 1999). We include industry-year fixed effects (Gormley and Matsa, 2014) and, in alternative specifications, both year fixed effects and firm fixed effects to take into account various omitted factors that can affect bonus payouts (Graham et al., 2012). To address potential endogeneity concerns, we employ the propensity score matching (PSM) approach and confirm that top executives receive large bonus awards before plan freezes. The probability of a plan freeze is estimated using firm financial and pension characteristics (Petersen, 1994; Munnell and Soto, 2007; Beaudoin et al., 2010; Comprix and Muller, 2011).

We further compare equity awards with bonus payouts to top executives ahead of plan freezes. Equity awards typically outweigh bonus payouts, but, as Sundaram and Yermack (2007) show, equity awards almost never enter pension benefit calculations, while bonus payouts almost always do. If boards increase bonuses for reasons other than boosting pensions (e.g., motivating managerial effort), we would expect to observe similar, if not larger, increases in equity awards. If boards are primarily concerned with maximizing pensionable earnings, however, we should not observe such increases. In fact, we do not observe increases in equity awards before plan freezes, suggesting that boards increase annual bonuses with the explicit aim of increasing pension benefits ahead of a freeze.

In addition to studying plan freezes, we examine potential pension benefit manipulation before the retirement of top executives, at which point these executives' pension benefits are capped. We look at executives who depart the firm at age 65 or older (Weisbach, 1988) and examine bonuses and equity awards received by each retiring executive in the previous year. We find an average increase of \$1.2 million in CEO annual bonuses one year before retirement at firms with DB plans, much larger than the comparable metric at firms without DB plans. We find no increases in equity awards for retiring top executives. These findings suggest that bonus increases before executive retirements are also related to pension benefits.[3]

ficer (CEO) entrenchment and ineffective board monitoring are the causes of increased CEO pay. In contrast, Rosen (1981), Murphy (2002), Murphy and Zabojnik (2004), Oyer (2004), Gabaix and Landier (2008), Edmans, Gabaix, and Landier (2009), Core and Guay (2010), Kaplan and Rauh (2010), Baranchuk, MacDonald, and Yang (2011), and Subramanian (2013) argue that the scarcity of managerial talent and the increasing importance of managerial skills largely explain observed changes in the level and dispersion of CEO pay.

[2] Sundaram and Yermack (2007) are the first to estimate the actuarial pension values for Fortune 500 chief executive officers. Sundaram and Yermack focus on the effect of executive pensions on corporate risk taking and CEO retirement decisions.

[3] "One of ExxonMobil's two supplemental pension plans for executives uses the three highest bonuses in the five years prior to retirement to calculate the executive's pension. As a result, a \$US4m bonus to chief executive Rex Tillerson in 2008 helped push the total value of his pension