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Consequences of deviating from predicted CEO labor market compensation on long-term firm value

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ABSTRACT

Building upon labor market theory, we investigate whether under- or over-investing in CEOs (i.e., strategically paying above or below a CEO's predicted labor market compensation rate) affects long-term firm value and whether there are diminishing returns to these investments. Our results indicate that investments in CEOs are positively related to long-term firm value and that the relationship diminishes, eventually becoming negative, as investments increase.

1. Introduction

Every year both academics and the popular press take offence to what seems to be the ever increasing compensation of Chief Executive Officers (CEOs) with some of the rhetoric revolving around a CEO's worth. Much of the yearly discussions question both why these individuals receive such high wages and whether firms actually benefit from the CEO's services relative to those high wages. Although academics have used agency theory, managerial capitalism, and other theories to explain high CEO pay, the labor market for a CEO's services may also have an impact on the growth of CEO pay. Not surprisingly, there are a growing number of studies that examine the role of the CEO labor market in CEO compensation (e.g., Chang, Dasgupta, & Hilary, 2010; Ezzamel & Watson, 1998; Fulmer, 2009; Porac, Wade, & Pollock, 1999) as well as how deviations from predicted labor market compensation rate may affect the firm and CEO decisions (Wade, O'Reilly, & Pollock, 2006). These studies recognize the effects of CEO compensation relative to the going compensation rate of the executive labor market when it comes to motivating, attracting, and retaining CEOs.

Economic theory and research suggest that under- or over-paying employees relative to the predicted labor market rate for their services affects individual behavior and thus performance. For example, Hicks (1932) recognized that the external labor market drives compensation rates and affects the motivation of employees. Abel (1990) argues that individuals consider relative income in their utility evaluations because of the importance of relative income to the acquisition of status and influence. CEOs, who place value on status and influence, may also be motivated by the external labor market rates given such rates represent a comparison point for relative income. Moreover, management theory also recognizes that relative pay has motivational effects. For example, Fong, Misangyi, and Tosi (2010) argue that overpaying CEOs (paying above a particular CEO's predicted market wage) leads to greater inputs from the CEO and thus better short-term financial returns.

However, there is a ceiling level for CEO effort and given a firm's limited resources there is a cost to over-investing in human capital. Such costs may be less visible in the short-term, but would nonetheless have serious consequences over time. Over-investing in human capital has the potential to limit investments in other areas of the firm, which would lead to a lower long-term firm value. For example, pay above the predicted labor market rate for a CEO seems to cascade down throughout the firm as higher pay for the CEO's subordinates (Wade et al., 2006) and thus over-paying CEOs may lead to high pay for all of the firm's employees. Additionally, Prospect Theory (Tversky & Kahneman, 1992) provides theoretical insight into the behavior of overpaid or underpaid CEOs when making decisions under uncertainty.

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In essence, overpaid CEOs are likely to take safe bets (high probability of success and with high expected values), which may likely lead to better long-term outcomes. However, as overpayment grows, the number of safe bets diminishes and thus the relation between pay and firm value is unlikely to be monotonic. While prior research has examined the relationship between CEO compensation and firm performance, CEO compensation's effect on long-term firm value has largely been neglected. Such analyses would allow researchers to determine if CEO compensation truly influences a firm's long-term value to its shareholders. Additionally, paying CEOs below the predicted market rate for their services could have negative long-term firm value implications because Prospect Theory would imply that such CEOs would take bets with a low probability of success and with low expected values, but high payoffs if they were to succeed.

We investigate the possibility that paying above or below a CEO's predicted labor market rate for their services may influence long-term firm value. Following previous research on the effects of CEO pay differentials, we start with the notion that the predicted labor market rate for a CEO reflects the market value for that CEO's services. Using Prospect Theory, we theorize that CEOs face differing tolerances toward uncertainty depending upon whether their pay is above or below their predicted labor market rate. Thus firms may face benefits and costs if the firm under- or over-pays relative to the predicted labor market rate for their CEO, which is reflected in a firm's long-term firm value. Provided that firm owners invest for long-term outcomes, paying above or below a CEO's predicted market rate should have long-term firm value consequences.

2. Theory and hypotheses

The dominant means of assessing compensation through references to a market wage is born from neoclassical labor economic theory (see Boyer & Smith, 2001), which states that external labor markets are the mechanisms through which firms establish wages to attract and retain employees (Hicks, 1932). Fulmer (2009) suggests that firms are viewed as "price-takers" in the sense that a particular firm's wages are, in part, determined by referencing the wages of firms in competition to fill similar jobs with similar talent. Variations in wages are largely a function of differences in referent labor markets (e.g., different industries and locations), firm specific differences (e.g., firm size and difference in governance), and human capital (e.g., performance, experience, and age). However, firms can, and do, depart from paying the predicted labor market rate for particular jobs and theory and research suggest that firms that do so face consequences. Paying above the predicted labor market rate is likely to attract and retain more and better employees; however, as Samuelson (1951) notes, those that pay below the market rate will likely be punished in the form of withdrawal of effort.

For CEOs, it is clear that in theory and practice, the external labor market has an effect on compensation and motivation. Deckop (1988) notes that a firm's compensation committee, a subset of the board of directors, collects data on pay of other CEOs within the firm's industry as a basis for determining their own CEO's compensation. Ezzamel and Watson (1998) suggest that deviating from the predicted labor market compensation rate for CEOs can have motivational effects, which Watson, Storey, Wynarczyk, Keasey, and Short (1996), Wade et al. (2006), and Fong et al. (2010), using theories relating to fairness, show to be accurate regarding short-term outcomes. For example, Watson et al. (1996) provide evidence that deviating from the labor market rate affects CEOs' level of job satisfaction and Fong et al. (2010) show that deviating from the market rate has firm profit (ROA) and CEO withdrawal consequences.

Although the labor market rate is influenced by many factors, the Strategic Human Resources (Strategic HR) literature focuses on the role of human capital to determine the predicted labor market rate for individuals (e.g., Hitt, Bierman, Shimizu, & Kochhar, 2001). The Strategic HR literature argues that investments in human capital resources allow for access to intangible firm-specific resources critical to organizational success and a competitive advantage (Pfeffer, 1994). For example, knowledge, which largely exists in a firm's human capital, is a firm-specific resource and primary asset for the firm (Grant, 1996) and thus firms can create value through managing their human capital resources (Lepak & Snell, 1999). Fulmer (2009) proposes that CEOs possess human capital that is critical to firm success and is in both short supply and high demand. Zhang and Rajagopalan (2004) provide evidence that firms that hire externally or replace their existing CEOs with an unprepared insider generally perform worse than firms that "groom" an heir apparent. Firms that are allowed the opportunity and time to pass on knowledge from one executive to the next seem to outperform those that are not afforded the same opportunity. Thus, to retain a CEO's human capital it is in the interest of boards of directors to pay above their CEO's predicted market rate to increase CEO retention and subsequently the transfer of firm-specific knowledge.

Hitt et al. (2001) notes that although human capital provides benefits to the firm, there are costs to investing in human capital, especially human capital expected to provide the firm a competitive advantage. Hitt et al. (2001) suggests that firms are sometimes willing to over-invest in employees early on by paying more than an employee's marginal productivity with the expectation that the firm will recoup their investment through higher productivity in the future. With perfect information an employee's predicted labor market rate should reflect their marginal productivity. For CEOs, agency theory suggests that information asymmetry and uncertainty are unlikely to lead to perfect information. Because CEOs have better information on their own abilities, a form of information asymmetry, and because it is in a CEO's best interests to mislead the firm on his or her abilities (Zajac & Westphal, 1994), which allows for adverse selection, imperfect information is likely to be used to determine the predicted labor market rate. However, both Fama (1980) and Wowak, Hambrick, and Henderson (2011) suggest that firms eventually "settle up" in the sense that firms adjust income for CEOs depending upon their performance. Thus, boards may choose to pay more or less than the CEO's predicted labor market rate with the notion that settling up may occur if their investments do not materialize or if the CEO outperforms the firm's compensation investment. In essence, the board would adjust over-payment downward if firm performance does not increase or adjust under-payment toward the labor market rate if firm performance is higher than expected. Although the information asymmetry may lead to imperfect predictions of a CEO's current predicted market rate, boards can still use a CEO's current predicted market rate as a guide to set compensation with the understanding that the ex post settling up may occur.

It is the potential adjustment, or settling up, process that may motivate CEOs to take action when pay deviates from their predicted labor market rate, particularly when they are paid above their predicted market rate. In essence, CEOs in overpayment situation have an incentive to maintain or increase firm value without taking undue or excessive risk, or face a reduction in pay. Similar to the argument made by Hitt et al. (2001), firms may look to recoup their investments in human capital in the form of higher firm performance and thus some compensation committees may overpay their CEOs with the expectation that the investment will pay off in future performance.

Firms may also pay below a CEO's predicted labor market rate and they may be doing so because the board may disagree with the predicted labor market rate (i.e., the board may discount the CEO's ability) and determine the CEO's abilities may not lead to higher firm value. Research suggests that boards deviate from optimal hiring for the CEO position for political reasons (Zald, 1965) or the use of poor criteria for selection (Khurana, 2002). For example, departing CEOs and directors may influence selection (Zajac & Westphal, 1996), which may lead to suboptimal hires. Such sub-optimal hires are just one example of why boards may under-pay their CEOs (e.g., these CEOs were not hired for their ability, but for political reasons). We should emphasize that CEOs in an under-payment situation may be able to gain through the settling