International Review of Financial Analysis xxx (2014) xxx–xxx

Contents lists available at ScienceDirect

International Review of Financial Analysis

CEO power and the structure of CEO pay☆

Chongwoo Choe [a], Gloria Y. Tian [b,*], Xiangkang Yin [c]

[a] Monash University, Australia
[b] University of Lethbridge, Canada
[c] La Trobe University, Australia

ARTICLE INFO

Article history:
Received 16 May 2014
Received in revised form 16 September 2014
Accepted 3 October 2014
Available online xxxx

JEL classification:
D82
G32
J33

Keywords:
Managerial power
CEO pay
Stock-based compensation

ABSTRACT

This paper fleshes out the rent extraction view of CEO compensation put forward by the managerial power theory (Bebchuk, Fried, & Walker, 2002), and tests its main implications on the relation between CEO power and the structure of CEO pay. For a measure of CEO power most relevant to managerial power theory, we use the CEO pay slice due to Bebchuk, Cremers, and Peyer (2011). Based on the sample of S&P 500 firms for the period of 1999–2008, we find that the implied relation between power and pay is largely supported. Our findings suggest that the managerial power theory has relevance in explaining the relation between power and pay when the focus is on managerial bargaining power. Given the multiple dimensions of CEO power, however, the scope of power may need to be broadened for a better understanding of how managerial power affects firm performance.

1. Introduction

The compensation for corporations' chief executive officers (CEOs) continues to attract interests from academics, the business press as well as the general public. Of particular interest in recent times has been the growth in the level of CEO compensation that is beyond the increase in firm size or corporate earnings. For example, Bebchuk and Grinstein (2005) report that, during the period of 1993–2003, the average total CEO compensation for S&P 500 firms increased by 166%, of which only 66% is explained by an increase in firm size measured by sales and performance measured by return on assets with the rest remaining unexplained.[1,2] The growth in CEO pay, against the backdrop of corporate scandals and governance failures that plagued corporations around the world, has put executive compensation at the center of the debate on corporate governance.

Among the many issues that relate to executive compensation is a debate on whether the leading paradigm of agency theory is adequate in explaining the observed practice of executive pay. In the standard agency theory, executive compensation is viewed as a solution to shareholders' optimal contracting problem: the contract is designed by shareholders or their representatives to maximize shareholder value subject to the CEO's incentive and participation constraints. In a series of articles and an influential book, Bebchuk and his co-authors (Bebchuk & Fried,

☆ An earlier version of this paper was previously circulated as "Managerial Power, Stock-based Compensation, and Firm Performance: Theory and Evidence". We are thankful for many useful comments from Paul Grout, Baibing Li, Chih-Liang Liu, Ron Masulis, Randall Morck, Peter Pham, Laura Starks, Sudipto Dasgupta, seminar audience at various institutions, and participants at the Monash Conference on Executive Compensation and Corporate Governance (2008) and the Asian FMA meeting (2009). Jessica Chung and Rose Zhou provided excellent research assistance. This research was supported under the Australian Research Council's Discovery Projects funding scheme (ARC Discovery Project Grant DP0663716). Any remaining errors are our own.
* Corresponding author at: Faculty of Management, University of Lethbridge, Calgary, AB T2G 4V1, Canada. Tel.: +1 403 3324699.
E-mail addresses: Chongwoo.Choe@monash.edu (C. Choe), Gloria.Tian@uleth.ca (G.Y. Tian), x.yin@latrobe.edu.au (X. Yin).

[1] According to *Forbes* ("Big paychecks", March 5, 2007), the collective total CEO pay for the largest 500 firms in the US increased by 38% during 2005–2006. During the same period, the S&P 500 index rose by 15.79%. Numerous articles in the media report high-profile cases of 'excessive' CEO pay despite mediocre firm performance. For example, see *The Economist* (November 24, 2005), "Too many turkeys"; *The Economist* (January 18, 2007), "Power pay"; *Fortune* (June 30, 2006), "The real CEO pay problem"; and *The New York Times* (January 4, 2007), "An ousted chief's going-away pay is seen by many as typically excessive".

[2] An alternative explanation for the growth of CEO pay is offered by Gabaix and Landier (2008). Based on the data on CEO pay in the US between 1980 and 2003, they find that the six-fold increase in CEO pay during the period can be attributed to the six-fold increase in market value of firms.

http://dx.doi.org/10.1016/j.irfa.2014.10.004
1057-5219/

2003; Bebchuk & Fried, 2004; Bebchuk et al., 2002) challenge this view. Their main argument is that observed practice of executive pay is explained better by the managerial power theory whereby CEOs effectively set their own pay by influencing the pay-setting process.[3] Bebchuk and Fried (2004) provide ample evidence in support of this view. The interest in the managerial power theory and the controversies surrounding CEO power and pay can be witnessed by a host of the critiques of, and the support for Bebchuk and Fried's book.[4]

The central thesis of managerial power theory is simple. Rather than a solution to shareholders' optimal contracting problem, executive compensation is viewed as a mechanism through which powerful, entrenched CEOs extract rent from shareholders. As a consequence, the more powerful CEOs are, the larger pay they award themselves with less strings attached. In doing so, the only constraint CEOs face is what Bebchuk and Fried called the 'outrage constraint', which curbs pay that is considered too excessive.[5] If one takes these implications literally, then the corollaries are that the total CEO pay should increase in managerial power and pay-performance sensitivity of CEO compensation should decrease in managerial power. While the first corollary seems hardly disputable, the second one is not entirely clear. If more power renders the CEO more room for rent extraction, then it would be rational for the CEO to try to maximize firm value, which he can extract through channels that are incentive-neutral. In other words, one needs to be more clear about how managerial power affects the structure of CEO compensation.

The purpose of this paper is to flesh out and test the implications of managerial power theory on the relation between CEO power and the structure of CEO pay. Specifically we are interested in how CEO power affects an incentive-neutral component of pay such as salary, performance-based pay such as stock-based compensation and, consequently, total compensation. To focus on the main thesis of managerial power theory, we restrict our attention to one aspect of power, namely the CEO's power to influence his own pay. Then the effect of CEO power on the structure of CEO pay depends on the extent to which the CEO can use his compensation contract for rent extraction. If the CEO can use salary as the main vehicle for rent extraction, then more power should lead to larger salary. But the CEO's performance-based pay should be independent of CEO power. The reason is that the CEO will choose an optimal level of performance-based pay that maximizes the size of pie, which he can extract through salary. Thus power does not lead to a distortion in efficiency, but only results in wealth transfer from shareholders to the CEO. However, if the CEO's salary cannot be increased too much for some reasons,[6] then his performance-based pay can be used as an additional channel for rent extraction. The CEO will first use salary for rent extraction and, after the ceiling has been reached, turn to stock-based compensation. Therefore, in firms that face a binding salary ceiling, the CEO's stock-based compensation would increase in CEO power. Moreover, since the increase in stock-based compensation in these firms would expose the CEO to too much risk, the CEO's total pay must also increase in CEO power to compensate for the risk. To summarize, we expect the CEO's salary to increase in CEO power in all firms, the CEO's stock-based compensation to increase in CEO power only in firms that face a binding salary ceiling, and the CEO's total compensation to increase more in CEO power in firms with a binding salary ceiling.

We take these implications to the data from a sample of S&P 500 firms for the period of 1999–2008. A key element in our empirical analysis is to divide firms into two groups depending on whether they perceive some form of effective salary ceiling. We use $1 million as the threshold, of which justification is provided at length in Section 3.2. We call those firms that pay CEO salary no more than $1 million 'constrained' and the rest 'unconstrained'.

For a measure of CEO power most relevant to managerial power theory, we use the CEO pay slice due to Bebchuk et al. (2011). This measure most closely proxies the CEO's bargaining power, as it reflects the extent to which the CEO's power and influence is used to push for an increase in CEO compensation (Bebchuk et al., 2011, p. 206). Although the CEO pay slice is our primary proxy for CEO power, we also use two additional measures of CEO power: board independence and concentration of titles. These two measures reflect more general dimensions of CEO power such as decision-making authority and, hence, more direct relation to firm performance (Adams, Almeida, & Ferreira, 2005). The purpose of using the three different proxies of CEO power is to examine whether the implications of managerial power theory have support when one considers various dimensions of CEO power. If they are supported only when power is proxied by the CEO pay slice, then we may say that the managerial power theory is relevant in explaining the relation between power and pay, but not the relation between power and firm performance. Since our hypotheses are derived based on the CEO's bargaining power, we expect them to have support when CEO power is proxied by the CEO pay slice. For the other two measures of CEO power, the relation between power and pay is indeterminate and is an empirical question.

When CEO power is measured by the CEO pay slice, our findings mostly support our hypotheses. First, in both groups of firms, salary increases in CEO power. Second, the CEO's total compensation increases more in the constrained group of firms when the CEO pay slice increases. These two results are both consistent with our hypotheses. Third, the CEO's stock-based compensation increases in CEO power in both groups of firms, although the magnitude of coefficient is smaller in the unconstrained group of firms. The last result partially supports our hypothesis, which predicts that the CEO's stock-based compensation increases in CEO power only in the constrained group of firms. But the larger increase in the constrained group of firms is consistent with the implication of our hypothesis. For the other two measures of CEO power, we only find support for the relation between power and salary. Given that these two measures of CEO power are more closely related to firm performance than the CEO pay slice, our results imply that the managerial power theory has limited applicability in explaining the relation between CEO power and firm performance.

Overall, our findings suggest that CEO power as envisaged in the managerial power theory is most closely proxied by the CEO pay slice. This is also the approach we have taken in deriving our hypotheses. That is, we have focused only on one aspect of managerial power, namely, the power to influence one's own pay. However, managerial power has diverse dimensions as has been pointed out by many (e.g., Adams et al., 2005; Finkelstein, 1992; Pfeffer, 1992). We have abstracted away other aspects of managerial power in this paper, not because they are not relevant but because our main objective is to understand more rigorously the central implications of managerial power theory. Defining power in this way leads to clear predictions regarding the relation between power

[3] The managerial power theory, broadly defined, can be traced back at least to Berle and Means (1932, pp 80–82). They describe the mechanism whereby the management, even with negligible share ownership, can assume effective control of the firm through the appointment of the proxy committee, which they dub management control. It is also found, although without formalization, in the more recent management literature. For example, Finkelstein (1992) describes various dimensions of managerial power. The ability to affect one's own pay is one dimension of managerial power, closely related to what Finkelstein called structural power, which is also the definition of power adopted by Lambert, Larcker, and Weigelt (1993). How managerial power influences CEO pay has been the subject of many studies from legal, organizational and sociological perspectives, as Bebchuk and Fried (2004) acknowledge.

[4] Various academic responses, critical as well as supportive, are listed on http://www.pay-without-performance.com. Weisbach (2007) offers a more 'balanced' review of the book.

[5] As Weisbach (2007) points out, the weakness of the managerial power approach is that the 'outrage' constraint is not well-specified. One possible interpretation is that the constraint imposes some upper bound either on the size of total CEO pay or on the element of pay that is highly visible to public, such as cash salary and bonus. In this paper, we take the second interpretation as it is also more in line with what Bebchuk and Fried called the 'camouflage' aspect of CEO compensation.

[6] In Section 3.2, we discuss why a salary cap – actual or perceived – can be a plausible constraint for some firms.

Please cite this article as: Choe, C., et al., CEO power and the structure of CEO pay, *International Review of Financial Analysis* (2014), http://dx.doi.org/10.1016/j.irfa.2014.10.004