Journal of Corporate Finance 41 (2016) 426–444

Contents lists available at ScienceDirect

Journal of Corporate Finance

journal homepage: www.elsevier.com/locate/jcorpfin

# Severance agreements and the cost of debt☆

Sattar A. Mansi [a,*], John K. Wald [b], Andrew (Jianzhong) Zhang [c]

[a] Virginia Tech, United States
[b] University of Texas at San Antonio, United States
[c] University of Nevada Las Vegas, United States

ARTICLE INFO

*Article history:*
Received 12 October 2015
Received in revised form 26 July 2016
Accepted 18 August 2016
Available online 28 August 2016

*JEL classification:*
G32
G34
G38
K22

*Keywords:*
Severance agreements
Cost of debt
Takeover probability
Firm risk
CEO turnover

ABSTRACT

Upon examining the language used in recent SEC filings, we find that severance agreements are often paid whether or not the CEO leaves the firm due to a change in control. We hypothesize that since severance agreements compensate CEOs in the event of termination, CEOs with these agreements will have an incentive to increase firm risk and decrease effort. Consistent with this hypothesis, we document a significant positive relation between the use of severance agreements and the cost of debt (10% higher yield spreads for firms with severance agreements). The results hold after controlling for the probability of takeover, the probability of CEO turnover, and whether the firm has investment or non-investment grade debt. These results can be explained by an increase in firm risk and a higher likelihood of CEO turnover associated with severance agreements. Overall, the evidence suggests that the effects of severance agreements extend beyond takeovers, and that these additional implications are primarily negative for the firm and for debt holders in particular.



## 1. Introduction

Senior executive compensation packages often contain large severance payouts that provide cash and non-cash compensation upon a triggering event such as demotion, termination, or forced resignation (Gompers et al., 2003). These payouts have become increasingly popular in the last two decades with the RiskMetrics data set documenting an increase in adoptions from roughly 50% in 1990 to 82% in 2010.[1] While the existing literature (see, e.g., Bebchuk et al., 2010) focuses on compensation contracts which apply only when a change in control occurs (e.g., referred to as golden parachutes), upon examining a number of recent proxy filings we find that these contracts typically include a payout whenever the CEO is terminated.[2] In this paper, we examine

☆ The authors would like to thank an anonymous referee, Natasha Burns, Ambrus Kecskes, Ugur Lel, Jeffery Netter (the editor), Tatyana Sokolyk, and seminar participants at Virginia Tech and University of South Florida for comments and suggestions. Special thanks to Bill Maxwell at Southern Methodist University for providing debt data. The remaining errors are the sole responsibility of the authors.

* Corresponding author.
*E-mail addresses:* smansi@vt.edu (S.A. Mansi), john.wald@utsa.edu (J.K. Wald), andrew.zhang@unlv.edu (A.(J.) Zhang).

[1] Until recently, the adoption of severance agreements did not require shareholder approval, although under the Dodd-Frank Act of 2010, firms are now required to receive approval from their shareholders when adding a severance agreement to the executive's compensation contract. We use the term severance payout to refer to all compensation packages received including golden parachutes.

[2] We collect a sample of 50 recent proxy statements which are marked by RiskMetrics as having golden parachutes, and we find that in 86% of the sample there is a payout even if a change in control does not occur. Thus, we use the golden parachute indicator as a measure of whether a severance agreement exists. We acknowledge that this measurement error will cause some bias toward zero in our estimated coefficients.

http://dx.doi.org/10.1016/j.jcorpfin.2016.08.012
0929-1199/

the effect of severance agreements on CEO incentives with respect to risk and effort, and we show how the presence of these agreements in compensation contracts affects the firm's cost of debt capital.

In contrast to our focus on CEO incentives and the cost of debt, the existing literature on severance agreements mostly considers the effects of golden parachutes on takeovers and stock prices. For instance, Machlin et al. (1993), and Lambert and Larcker (1985) show that golden parachutes imply a greater takeover probability, while Hartzell et al. (2004) show that greater payouts to the CEO are associated with lower acquisition premia. An early event study by Lambert and Larcker (1985) finds a positive shareholder response to the adoption of golden parachutes; but a more recent study by Brusa et al. (2009) finds that golden parachute adoption is a negative event, and more negative for more generous agreements. Recently, Bebchuk et al. (2010) document that golden parachutes are associated with a decrease in firm value, a greater likelihood of acquisition, and a lower acquisition premium. Overall, the literature finds mixed evidence on the relation between golden parachutes and shareholder wealth.

We hypothesize that since severance agreements provide a large payment in the event of termination, CEOs have an incentive to increase firm risk and decrease effort, and that these changes in risk and effort lead to an increase in CEO turnover. Lys et al. (2007) argue that, when managers are risk averse, the use of large severance agreements provides downside protection in addition to rewards for exceptional stock performance. This downside protection induces managers to undertake risky projects. Yermack (2006) provides evidence that firms are motivated to adopt golden handshakes to mitigate managerial problems including inadequate risk-taking, shirking, entrenchment in office, and incomplete disclosure. Similarly, Rau and Xu (2013) find that contingent severance pay is promised in advance for managers to provide insurance for their human capital value and compensate them for the risks they undertake.

The literature also provides evidence about how the Gompers et al. (2003) governance index of shareholder rights is associated with decreased effort. Core et al. (2006) examine the association between corporate governance, as proxied by the Gompers et al. (2003) index of shareholder rights, and operating performance. Core et al. find a significant negative association between governance and return on assets, which suggests that badly governed firms have greater agency costs. Additionally, Bertrand and Mullainathan (2003) find that managers who are more insulated from the takeover market are less likely to take risks and more likely to "enjoy the quiet life."

Using the RiskMetrics dataset covering the period from 1990 through 2015, we instead examine the relation between the presence of severance agreements in CEO contracts and the cost of debt financing. We focus on the debt market because of its sheer size and its dissemination of information to the real economy.[3] We posit that the increase in risk and decrease in effort would lead to an increase in the firm's bond yield spreads, and that this relation would persist even after controlling for the probability of takeover. Using data from the Lehman Brothers Fixed Income database and the TRACE data set, we confirm our hypothesis. Specifically, we find a significant positive relation; firms in which the CEO has a severance agreement have yield spreads which are about 10% higher than similar firms without severance agreements. This result is robust to controlling for other governance characteristics, firm-specific fixed effects, the likelihood of acquisition, whether the severance agreement is new or old, and whether the firm has investment or non-investment grade debt.

Next, we examine the channel through which severance agreements impact the cost of debt by considering the effect of severance agreements on firm risk and executive turnover. We find that firms which add a severance agreement in their CEO compensation contracts see a significant increase in idiosyncratic risk, and this holds when we control for endogeneity using an instrumental variable approach and if we exclude firms which later faced takeover attempts.[4] We also find that firms with severance agreements are more likely to have the CEO leave the firm, and again this holds even if we exclude firms which faced a takeover attempt. Overall, these findings are consistent with an increase in risk for CEOs with severance agreements.

Our paper contributes to the literature by providing evidence that the use of severance agreements is associated with a higher cost of debt. Moreover, we show that the increase in the cost of debt associated with severance agreements coincides with an increase in firm risk and an increase in CEO turnover. Our finding that severance agreements increase the cost of borrowing complements the results of Bebchuk et al. (2010), who find that firms whose CEOs have a golden parachutes also have a lower industry-adjusted Tobin's Q. Moreover, Bebchuk et al. find that firm value declines during the period of a golden parachute adoption and continues to erode subsequently.

A prior literature finds that firms which measure higher on the Gompers et al. (2003) GIndex have a lower cost of debt (see Klock et al., 2005; Cremers et al., 2007). Here, we find that these results are limited to the type of governance provision considered. Thus, firms with golden parachutes have a higher GIndex value, and the existing literature would therefore predict that they have a lower cost of debt. We show that because of the particular nature of golden parachutes as a governance mechanism, this relation is instead reversed, and that there exists a strong positive relation between firms with golden parachutes and the cost of debt.[5]

[3] For bonds, causality is unlikely to be an issue. That is, a change in whether the firm has a severance agreement can cause yields to change, but it is less likely that changes in yield spreads will cause firms to adopt or remove severance agreements from their compensation contracts. Our econometric tests find no evidence of endogeneity in the yield spread specifications. A Durbin-Wu-Hausman test is unable to reject the null hypothesis that severance agreements are exogenous in the cost of debt specification (see the empirical analysis below).

[4] Takeovers often, but not always, have a negative impact for debt holders (see, e.g., Asquith and Wizman, 1990; and Billet, King, and Mauer, 2004).

[5] When we examine the relation between the individual GIndex components and the cost of debt, with the exception of severance agreements and confidential voting, the other components are associated with a lower cost of debt.