



Do risk-taking incentives induce CEOs to invest? Evidence from acquisitions

Ettore Croci ^a, Dimitris Petmezas ^{b,*}

^a Università Cattolica del Sacro Cuore, Milan, Italy

^b Surrey Business School, University of Surrey, Guildford, UK

ARTICLE INFO

Article history:

Received 19 September 2014
Received in revised form 9 March 2015
Accepted 10 March 2015
Available online 17 March 2015

JEL classification:

G34
J33
M12

Keywords:

Executive compensation
Managerial incentives
Risk-taking
Mergers and acquisitions
Overconfidence

ABSTRACT

This paper examines the effect of risk-taking incentives on acquisition investments. We find that CEOs with risk-taking incentives are more likely to invest in acquisitions. Economically, an inter-quartile range increase in vega translates into an approximately 4.22% enhancement in acquisition investments, consistent with the theory that risk-taking incentives induce CEOs to undertake investments. Importantly, the positive relation between vega and acquisitions is confined only to non-overconfident CEO subgroup. Further, corporate governance does not generally affect the association between vega and acquisition investments. Finally, vega is positively related to bidder announcement returns.

© 2015 Elsevier B.V. All rights reserved.

1. Introduction

The recent theoretical framework of [Edmans and Gabaix \(2011\)](#) predicts that risk-averse CEOs are offered compensation contracts with greater risk-taking incentives which induce them to take on risky projects. However, the empirical evidence is rather contradictory. While [Coles et al. \(2006\)](#) and [Gormley et al. \(2013\)](#) find a positive relation between option-based incentive contracts and risk-taking, [Hayes et al. \(2012\)](#) show mixed results. Motivated by the conflicting empirical evidence on the subject, this study re-examines whether risk-taking incentives induce CEOs to conduct risky investments in the takeover setting. Mergers and acquisitions (M&As) represent major corporate investments with CEOs receiving, very often, lucrative compensation packages ([Grinstein and Hribar, 2004](#)). As [Harford and Li \(2007\)](#) argue, acquisition decisions may be the most important corporate resource allocation decisions that CEOs take. Yet, acquisition projects are also investments with uncertain net present value (NPV), which may alter firm's status quo and increase risk ([Datta et al., 2001](#)). More precisely, regardless of whether all acquisitions increase firm risk per se, acquisitions constitute risky investments as they also expose CEOs to a certain degree of risk. In particular, CEOs might get fired ([Lehn and Zhao, 2006](#)) or their firm can become a potential takeover target if the acquisition is bad ([Mitchell and Lehn, 1990](#)).¹

* Corresponding author. Tel./fax: +44 1483 686 376, +44 1483 686 301.

E-mail address: d.petmezas@surrey.ac.uk (D. Petmezas).

¹ The source of risk (i.e., whether acquisitions increase firm or CEO-specific risk) is beyond the scope of this paper. Our premise is that all acquisitions involve some sort of risk and are therefore risky investments irrespective of where this risk comes from.

Using M&As to investigate the relation between incentive contracts and investment policy is of paramount interest for two main reasons: First, given the well-documented presence of substantial agency conflicts in M&As (Jensen, 1986; Lewellen et al., 1985; Morck et al., 1990), corporate takeovers – by far from any other corporate investment – serve as an ideal testing platform to explore the relation between managerial risk-taking incentives and investment decisions. Specifically, increases in risk-linked compensation are in line with the agency theory, which suggests that optimal CEO compensation should align the interests of risk-averse managers with those of shareholders by motivating managers to commit to risk-increasing projects (Jensen and Meckling, 1976; Smith and Stulz, 1985). Second, while many acquisitions enhance bidding firm shareholders' wealth, including CEOs with equity-based compensation, a significant fraction destroys value.² Therefore, particularly in M&As, CEOs should be induced with greater risk-taking incentives to make the investment.

In fact, following the seminal work on agency theory by Jensen and Meckling (1976), the central principle of the principal–agent theory is the positive association between risk and incentives (Holmström and Milgrom, 1987); in particular, higher performance pay induces greater effort from the agents but increases the risk on their compensation.³ Hence, the sensitivity of CEO wealth to stock price, called delta in the literature, appears to align managers and shareholders' interests (Jensen and Murphy, 1990). Nevertheless, at the same time delta increases managers' exposure to risk, which might prevent CEOs from some positive NPV projects when they are very risky. In this respect, Smith and Stulz (1985) argue that shareholders can reduce managers' risk aversion to risky but valuable investment projects by increasing the convexity of the relation between managers' wealth and firm performance using, for instance, options (Guay, 1999). Therefore, the sensitivity of CEO wealth to firm stock return volatility, which we refer to hereafter as vega, should induce risky investment choices by CEOs who seek to benefit from an increase in share price volatility. Overall, the aforementioned discussion raises a number of important yet unanswered questions: Do risk-taking incentives induce CEOs to carry out an acquisition deal? What drives the relation between risk-taking incentives and M&As? Do corporate governance mechanisms play a role in the association between risk-taking incentives and acquisition investments?⁴ Finally, what is the relation between CEO risk-taking incentives and bidder announcement returns?

This study draws motivation from the conflicting empirical evidence regarding the relation between managerial incentive plans and firm investment policy and addresses these questions testing the role of option-based plans – particularly vega controlling also for delta⁵ – in the context of M&As. We use a sample of US acquisitions over the period from 1997 to 2011 and find strong support to our conjectures. As a preliminary step, we show that, consistent to the prior literature, acquisitions increase firm risk.⁶ Post- or around the event (excess) stock return volatility of firms involved in acquisitions is significantly higher than their pre-announcement (excess) stock return volatility. Next, and most importantly, we find that CEO vega is positively associated to M&A investments at the 1% significance level. To gauge the economic significance of these estimates, an inter-quartile range increase in vega boosts M&A investments by approximately 4.22%. This is consistent with Edmans and Gabaix's (2011) theoretical model of CEOs being offered greater risk-taking incentives to conduct risky investments.

We also perform the following empirical tests. We first explore what might drive the relation between risk-taking incentives and acquisition investments. Motivated by Ross (2004), who argues that increasing the convexity of compensation through options does not necessarily make an agent more willing to take risks, and agents' attitudes towards risk are also important elements of their behavior, we perform a test to assess whether CEO overconfidence drives the relation between risk-taking incentives and M&A investments. Given the theoretical model of Gervais et al. (2011) that overconfidence can lead to increased risk-taking, increasing the convexity of the compensation contract could be irrelevant. In fact, it has been established in the literature that overconfident CEOs are significantly more acquisitive relative to non-overconfident CEOs (Doukas and Petmezas, 2007; Malmendier and Tate, 2008; Billett and Qian, 2008). Indeed, when we partition the sample by overconfident and non-overconfident CEOs, we do find that the positive relation between risk-taking incentives and acquisition investments holds for the non-overconfident CEO subgroup only.

In addition, we test the role of corporate governance in the relation between risk-taking incentives and M&A investments. We document that vega coefficient remains positive and significant, while its interactions with several corporate governance characteristics (such as entrenchment index, independent directors, dual class shares, CEO/Chairman duality and board size) appear generally not to capture the impact of CEO pay incentives on M&A investments.

Moreover, we pursue three different approaches to ease concerns regarding endogeneity. To deal with reverse causality, we use: i) the predicted estimates of lagged vega and delta; and ii) we perform systems of simultaneous equations. In particular, we run three-stage least squares (3SLS) regressions, in which the jointly determined variables are the acquisition investments, vega and delta. In both approaches our main result holds as CEO vega is positively associated with acquisition investments. To deal with potential

² It is worth noting that US public acquisitions are associated, on average, with negative acquiring firm announcement returns (Moeller et al. (2004)); nevertheless, almost half of the deals (42%) are positive NPV investment projects for a sample of acquisitions over the period 1992–2006 (The Boston Consulting Group, 2007).

³ Additionally, based on Holmström and Ricart i Costa (1986) theoretical model, managers are concerned about the impact of investment decisions on their future careers, which may, to an extent, create a potential misalignment of incentives. Along these lines, a recent work by Eckbo et al. (2014) shows that high personal costs of financial distress provide managers with incentives to hedge against default by choosing less risky investments.

⁴ Governance theory predicts that board monitoring and incentive compensation are likely to be substitute governance mechanisms. A recent study by Dicks (2012) presents a model in which governance and incentive compensation are substitutes in reducing agency costs.

⁵ Guay (1999) suggests that the mix of vega and delta varies to a great extent across firms and both affect risk-taking behavior. Therefore, in order to draw fruitful conclusions with regard to the relation between vega and acquisition investments, we should also control for delta.

⁶ Datta et al. (2001) provide evidence that acquirers with relatively higher equity-based compensation exhibit greater changes in stock return standard deviation post-acquisition; Barger et al. (2014) find that acquisition announcements are associated with an increase in bidder implied volatility; and finally, Furfine and Rosen (2011) and Hagendorff and Vallascas (2011) show that a merger increases acquirer default risk.

Download English Version:

<https://daneshyari.com/en/article/5093416>

Download Persian Version:

<https://daneshyari.com/article/5093416>

[Daneshyari.com](https://daneshyari.com)