Contents lists available at ScienceDirect







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

## The influence of governance on investment: Evidence from a hazard model $\stackrel{\mbox{\tiny\scale}}{\sim}$

Matthew T. Billett<sup>a</sup>, Jon A. Garfinkel<sup>a,\*</sup>, Yi Jiang<sup>b</sup>

<sup>a</sup> Tippie College of Business, University of Iowa, United States

<sup>b</sup> Mihaylo College of Business and Economics, California State University, Fullerton, United States

## ARTICLE INFO

Article history: Received 29 September 2009 Received in revised form 18 November 2010 Accepted 30 January 2011 Available online 20 July 2011

JEL classification: G32 G34 J33

*Keywords:* Corporate governance Investment spike Hazard model

## 1. Introduction

Does corporate governance affect the efficiency of firm investment? Empirical evidence is relatively clear when investment occurs in the form of an acquisition. For example, Lewellen, Loderer, and Rosenfeld (1985) show that bidder announcement returns are increasing in managerial ownership. More recently, Masulis, Wang, and Xie (2007) show that acquirers with worse governance experience more negative announcement returns to their bids. Both suggest that poor governance associates with less efficient investment decisions.

By contrast, the evidence is less clear when the investment is "built" via capital expenditures. Harford, Mansi, and

jon-garfinkel@uiowa.edu (J.A. Garfinkel), yjiang@fullerton.edu (Y. Jiang).

## ABSTRACT

Does corporate governance affect the timing of large investment projects? Hazard model estimates suggest strong shareholder governance may deter managers from pursuing large investments. Controlling for investment opportunities, firms with good governance experience longer spells between large investments. However, in the presence of financial constraints or strong CEO incentives (high delta ( $\delta$ )), we find no such timing differences. Finally, these higher investment hazard firms exhibit significantly negative long-run operating and stock performance. Overall, our findings are consistent with the notion that poor governance associates with overinvestment.

© 2011 Elsevier B.V. All rights reserved.

Maxwell (2008) find evidence that poor governance associates with greater industry-adjusted investment, as does Richardson (2006). By contrast, Bertrand and Mullainathan (2003) and Giroud and Mueller (2010) suggest poor governance associates with underinvestment. It is difficult to draw sweeping conclusions regarding the relationship between governance and (directional) investment efficiency from such disparate results.

One problem with ascertaining the precise relation between governance and the efficiency of built investment is that firms need not announce internal investments, severely limiting the usefulness of event study approaches.<sup>1</sup> Instead, most studies use regressions of investment on proxies for investment opportunities. "Optimal" investment suggests investment opportunities should be the only significant determinant of investment. If investment is found

 $<sup>^{\</sup>star}$  We thank Paul Hribar, Mark Leary (the referee), Erik Lie, and Anand Vijh for many helpful comments and suggestions. All remaining errors are our own.

<sup>\*</sup> Corresponding author.

E-mail addresses: matt-billett@uiowa.edu (M.T. Billett),

<sup>&</sup>lt;sup>1</sup> An exception is Chen (2006), who studies capital expenditure announcements by single-segment vs. diversified firms. There is no analysis of the influence of governance.

to depend on additional factors (such as cash flow, governance, leverage, etc.), then this may be interpreted as an inefficiency.

This approach, however, has been argued to suffer from a number of problems with regard to empirical implementation and interpretation of results. Numerous studies raise serious concerns about how to properly measure firmspecific investment opportunities, and how measurement error may bias the coefficients and inferences.<sup>2</sup> Second, there is significant evidence that the time-series of investment is lumpy rather than smooth.<sup>3</sup> This pattern of investment behavior violates a necessary assumption built into linear regressions of investment on *Q*: convex adjustment costs that are both differentiable and quadratic.

Whited (2006) proposes an empirical approach that alleviates the concerns of potential measurement error in proxies for investment opportunities and the lumpy nature of investment. She uses a hazard model to study the frequency of large investments ("spikes"), and the "spells" between spikes. Grouping firms by proxies for whether or not they are likely to be financially constrained, she compares the intertemporal pattern of investment spikes. Constrained firms have lower investment hazard rates (i.e., longer spells between investment spikes) than unconstrained firms, consistent with the importance of finance constraints.

We adapt Whited's (2006) approach to include governance. We use several proxies for the quality of a firm's corporate governance. However, our primary results are based on the "*G*-Index" of Gompers, Ishii, and Metrick (2003), which is designed to proxy for manager entrenchment by measuring firm use of anti-takeover provisions.<sup>4</sup> We group firms by whether they have a high or low *G*-Index, and estimate hazards on each group's investment behavior. High *G*-Index firms have more than the median number of "insular" (anti-takeover) provisions.

Two hypotheses predict the investment hazards of high *G*-Index firms will lie above those of low *G*-Index firms. Either entrenched managers (high *G*-Index) have a greater tendency to overinvest,<sup>5</sup> leading to a greater frequency of investment spikes, or strong shareholder protection (low *G*-Index) could suboptimally limit investment leading to less frequent large investment spikes (underinvestment). By contrast, it is possible that hazards will be *lower* for entrenched managers (high *G*-Index), if they prefer the "quiet life."<sup>6</sup>

We find that the investment hazards for high *G*-Index firms lie above those for low *G*-Index firms. A well-

established form of weak shareholder protection (managerial entrenchment), associates with more frequent investment spikes. This leads to our first contribution: to use the hazard methodology to alleviate the influence of measurement error issues and the lumpy nature of investment, and shed light on the conflicting conclusions found in the literature. Our results are consistent with the conclusions in Harford, Mansi, and Maxwell (2008) and Richardson (2006), but without the serious concerns raised above with respect to a linear regression framework.

We then control for the effects of financial constraints. Since Whited (2006) shows that financial constraints reduce investment hazards, our results may be driven by less managerial entrenchment among financially constrained firms. We therefore stratify our sample based on both *G*-Index and whether the firm faces financial constraints. We find that unconstrained firms with more anti-takeover provisions spike most frequently, and the difference between this group and all others is significant (while there is no difference between these other groups' hazards).

These results suggest corporate governance and finance constraints interact to influence investment behavior. To date, little work has focused explicitly on this possibility.<sup>7</sup> Of particular interest is our finding that (one form of) good governance reduces the hazard (lengthens the time between spikes) among financially unconstrained firms. This suggests that precisely where managers may have greater opportunity to overinvest, governance plays a positive role. Also interesting is the result that the hazard rates of wellgoverned financially unconstrained firms are indistinguishable from well-governed financially constrained firms (as well as poorly governed constrained firms). It suggests that the impact of financial constraints appears to be most pronounced in the subgroup of firms with weak governance. Both governance and financial constraints appear to play important roles in explaining firms' investment patterns.

So what drives the difference in the hazards? How do we distinguish between the two possible interpretations that poor governance associates with "overinvestment" or strong governance associates with "underinvestment"? We take two different approaches to gain insight on which interpretation carries more empirical weight. First, we focus on an alternative shareholder-manager alignment (i.e., governance) mechanism—a CEO incentives measured by delta  $(\delta)$ .<sup>8</sup> If unconstrained, high *G*-Index firms overinvest, then perhaps CEOs with higher deltas should be less inclined to overinvest given their stronger ties to shareholder outcomes.<sup>9</sup> In this case, among the unconstrained and high *G*-Index firms, we would expect

<sup>&</sup>lt;sup>2</sup> See, for example, Erickson and Whited (2000), Bond and Cummins (2001), Cooper and Ejarque (2001) and Cummins, Hassett, and Oliner (2006).

<sup>&</sup>lt;sup>3</sup> See, for example, Doms and Dunne (1998).

<sup>&</sup>lt;sup>4</sup> This is in deference to its near ubiquitous use in the governance literature. Also, related work by Harford, Mansi, and Maxwell (2008) focuses on this metric. Our inferences are the same under alternate measures of executive insulation from the consequences of poor decision outcomes.

<sup>&</sup>lt;sup>5</sup> In the spirit of Harford, Mansi, and Maxwell (2008) or Richardson (2006).

<sup>&</sup>lt;sup>6</sup> For e.g., Bertrand and Mullainathan (2003) or Giroud and Mueller (2010).

<sup>&</sup>lt;sup>7</sup> A notable exception is Bøhren, Cooper, and Priestley (2007). They orthogonalize governance with respect to financial constraints in recognition that the two may be correlated. However, they do not examine whether the two types of constraints (governance and financial) substitute in their influence on investment. Moreover, their inferences rely on a linear regression framework.

<sup>&</sup>lt;sup>8</sup> This also recognizes that a firm's overall governance structure is a function of many factors, including corporate charter and compensation structures.

<sup>&</sup>lt;sup>9</sup> There is an implicit assumption about CEO deltas and optimal investment incentives in this statement. We address it below.

Download English Version:

https://daneshyari.com/en/article/960366

Download Persian Version:

https://daneshyari.com/article/960366

Daneshyari.com