



Family ownership as a moderator between R&D investments and CEO compensation[☆]



Shou-Min Tsao^{a,*}, Che-Hung Lin^a, Vincent Y.S. Chen^b

^a National Central University, Taiwan, ROC

^b National University of Singapore, Singapore

ARTICLE INFO

Article history:

Received 1 January 2014

Received in revised form 1 July 2014

Accepted 1 August 2014

Available online 11 September 2014

Keywords:

CEO compensation

Family firms

R&D investment

Investment efficiency

Myopic R&D investment behavior

ABSTRACT

Firms can curb opportunistic managerial R&D investing behavior by increasing the sensitivity of CEO compensation to R&D investment. Using a sample of firms in Taiwan's R&D-intensive industries, this study examines whether family ownership moderates the sensitivity of CEO compensation to R&D investment. The results show that the sensitivity of CEO compensation to R&D investment is higher for family firms than for nonfamily firms, and that CEO compensation in family firms is based more heavily on the firm's level of R&D investment than on performance. In addition, R&D investment by family firms leads to greater investment efficiency, firm value, and growth rates than similar investment by nonfamily firms. These findings suggest that, in family firms, a compensation structure based on R&D investment enhances firm value.

© 2014 Elsevier Inc. All rights reserved.

1. Introduction

The separation between ownership and control creates potential conflicts between the interests of professional managers and stockholders (Jensen & Meckling, 1976), which may lead to opportunistic investing in research and development (R&D) by firm managers. Shareholders find R&D investment attractive because R&D is crucial for both the survival and the growth of a firm (Lee & O'Neill, 2003). However, R&D projects fail at high rates, and R&D projects may translate into profits only after many years (Dalziel, Gentry, & Bowerman, 2011; Hill & Rothaermel, 2003). In addition, R&D affects short-term profitability negatively because firms expense R&D spending immediately. Therefore, managers may be reluctant to invest in long-term strategically oriented R&D projects at the expense of forgoing short-term gains.

The extant compensation literature suggests that firms can mitigate myopic short-term R&D investment behavior by linking R&D investment to CEO compensation. This study extends this line of research by focusing on the role of family ownership in the relationship between R&D and CEO compensation. Family ownership may mitigate the agency conflict in R&D investment decision making. First, family owners possess both the ability and the incentive to gather information about firms'

investment projects because information asymmetry between managers and shareholders is lower in such firms than in non-family-owned firms. Second, family owners usually make a longer commitment to their firms and employees than do nonfamily shareholders. Family owners, knowing that R&D investment is a key to the survival and growth of R&D-intensive firms, tend to commit resources and encourage managers to invest in R&D. As such, families would structure CEO compensation to encourage strategically oriented R&D investment, which suggests that families positively moderate the relation between R&D investment and CEO compensation.

At the same time, the undiversified nature of family ownership may motivate family owners to make CEO compensation less contingent on R&D. Many family owners are large shareholders who hold undiversified investment portfolios and are thus likely to carry more risk than other shareholders. Therefore families may tend to be risk-averse and prefer less R&D investment (Anderson, Duru, & Reeb, 2012), which suggests that families negatively moderate the relation between R&D investment and CEO compensation. Given that families' better information access, long investment horizon, and risk aversion can have either a positive or negative impact on the sensitivity of CEO compensation to R&D investment, this study empirically tests whether family ownership positively or negatively moderates the association between R&D investment and CEO compensation.

We select a sample of firms in Taiwan's R&D-intensive industries from 1996 to 2009. R&D investment is a key to success in R&D-intensive industries and is positively related to CEO compensation only in high-technology (i.e., R&D-intensive) industries (Balkin, Markman, & Gomez-Mejia, 2000). Taiwan is an ideal setting to study this research question for two reasons. First, Taiwan's R&D-intensive

[☆] The authors thank the anonymous JBR reviewers, Dong-Shang Chang (National Central University), and Keng-Hsin Lo (National Central University) for their comments on earlier drafts of the paper.

* Corresponding author at: Department of Business Administration, National Central University, No. 300, Chung-Ta Rd., Chung-Li City, Taoyuan County, 32001 Taiwan, ROC. Tel.: +886 3 4227151x66132.

E-mail addresses: tsao@mgmt.ncu.edu.tw (S.-M. Tsao), 974401026@cc.ncu.edu.tw (C.-H. Lin), bizvcys@nus.edu.sg (V.Y.S. Chen).

industry is dominated by family-controlled firms. Second, Taiwan is well known for its technology sector. In fiscal year 2009, R&D-intensive industries accounted for 77% of the market value of firms listed on the Taiwan Stock Exchange. The control structure and industry distribution in Taiwan allow us to gain more insight into family businesses throughout Asia.

Our analysis reveals that the association between R&D investment and CEO compensation is higher in family firms than in nonfamily firms; and families tend to place more weight on R&D investment than on explicit performance measures, such as return on assets (ROA) and stock returns. Our findings provide preliminary evidence that families' information advantage and longer investment horizon outweigh their aversion to risk in making R&D investment decisions. This study further shows that family firms with higher family ownership are more sensitive to the relationship between R&D and CEO compensation than family firms with low family ownership. There is no significant difference in the R&D-CEO compensation sensitivity between the subsamples of family firms with low and high firm risk. These results reinforce the idea that the sensitivity of CEO compensation to R&D investment shaped by family ownership is primarily determined by families' informational advantage and long-term concerns about the firm's survival.

Further analysis indicates that family firms invest more in R&D than nonfamily firms. Also, R&D investment moderated by family firms is associated with higher R&D investment efficiency, firm value, and growth rates, suggesting that, for outside shareholders, R&D investment by family-owned firms creates more value than similar investment by nonfamily firms.

This study complements the existing literature by suggesting that the relative severity of agency problems between ownership and control across family and nonfamily firms influences the relative weights of *ex ante* strategic orientation indicators (e.g., R&D investment) and *ex post* financial performance measures on the CEO compensation contracts. This study also adds to the literature by showing that the unique features of family firms, such as better access to information and longer investment horizons rather than risk aversion explain the positive sensitivity of CEO compensation to R&D investment. Finally, this study furthers the understanding of family-firm research in a cross-country setting. The results suggest that even in a country with weak investor protection, family ownership can benefit outside shareholders through R&D investment.

2. Literature review and hypothesis development

2.1. Literature review

A typical agency problem stems from the separation between ownership and control that may lead managers to extract private benefits at the expense of shareholders (Jaskiewicz & Klein, 2007). R&D investment usually has a long-term strategic orientation and is crucial for both the survival and the growth of firms. However, R&D investment may not result in any payoff or may only translate into profits many years later. In addition, firms expense R&D expenditures in the period when they occur. Therefore, CEOs whose compensation is tied to earnings may forgo R&D investment to maintain short-term accounting and stock performance (Baber, Fairfield, & Haggard, 1991).

Prior research suggests that performance-based compensation aligns the interests of shareholders with the interests of managers and supports the effectiveness of the structure of CEO compensation in curbing myopic R&D investing behavior by management. For example, Duru, Iyengar, and Thevaranjan (2002) show that firms shield CEO compensation from recurring strategic expenditures, such as R&D and advertising expenditures. Balkin et al. (2000) find that a firm's capability to innovate is positively related to CEO pay. Cheng (2004) indicates that the association between changes in R&D spending and changes in the value of annual CEO option grants is significantly positive when the CEO approaches retirement or when the firm faces a small earning

decline or a small loss. Collectively, these studies indicate that firms can respond to myopic managerial R&D investing behavior by adjusting CEO compensation.

2.2. Hypotheses

Performance-based compensation, while effective in curbing managerial R&D investment behavior, also encourages short-term rather than long-run firm performance (Baysinger, Kosnik, & Turk, 1991). This study therefore examines whether family ownership moderates the relation between CEO compensation and R&D investment and specifically compares the compensation contracts of professional CEOs across family and nonfamily firms. The analysis excludes family firms with family CEOs because such family firms experience a different type of agency problem, which arises from the conflicts between controlling and noncontrolling shareholders (Kuan, Li, & Chu, 2011; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). In addition, a family CEO whose compensation is less performance-contingent than that of a professional CEO is less likely to be subject to myopic R&D investment concern (Ali, Chen, & Natarajan, 2011).

Family owners have better access to information and focus more on long investment horizons than are non-family shareholders (Anderson & Reeb, 2003; Brenes, Madrigal, & Requena, 2011; Ding, Zhang, & Zhang, 2008; Zahra, 2010). Shareholders may not easily recognize the value of investments in innovation and thus favor less R&D investment. Family owners have an information advantage over small shareholders and better understand the value and inherent risks of R&D projects. They are more likely to allow CEOs to increase their firm's risk exposure arising from R&D investment in exchange for long-run performance.

Family owners have a longer investment horizon than other shareholders. Families view their firms as an asset to pass on to their descendants, rather than as wealth to consume during their lifetimes. Families' long investment horizon enables family owners to tolerate short-term earning shortfalls and to encourage managers to engage in long-term strategy-oriented R&D investment. Because of these two unique characteristics, family firms may use more R&D-contingent CEO compensation to encourage R&D investment than nonfamily firms. While families' information advantage encourages R&D investment, it is plausible that this information advantage is associated with investment efficiency such that family firms can achieve the same target with less R&D investment.

Thus the first hypothesis of this study is the following proposal.

H1. Family firms positively moderate the relation between R&D investment and CEO compensation.

On the other hand, large, undiversified shareholders have an incentive to encourage firms to take on low-risk projects (Shleifer & Vishny, 1997). Family owners tend to be large shareholders with their wealth tied closely to their firms and thus have difficulty diversifying their risks. R&D projects are high-risk by nature, so family firms may prefer less R&D investment to achieve risk diversification (Anderson et al., 2012). To the extent that the outcome of R&D investment is highly uncertain, the extensive use of R&D-contingent compensation exposes family owners to a high level of risk. Thus, if they are risk-averse, family firms might be less likely to tie CEO compensation to the firm's R&D projects.

H2. Family firms negatively moderate the relation between R&D investment and CEO compensation.

In conclusion, two competing effects of family ownership occur on the relation between R&D investment and CEO compensation. Thus, whether family ownership positively or negatively moderates the relation between R&D investment and CEO compensation is an empirical question.

Download English Version:

<https://daneshyari.com/en/article/1017269>

Download Persian Version:

<https://daneshyari.com/article/1017269>

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