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Family ownership and R&D investment: The role of growth opportunities and business group membership

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ABSTRACT

This study examines whether the influence of family ownership on R&D investment varies depending on growth opportunities and business group membership. Using data on Korean firms over ten years (1998-2007), the study shows that family ownership is negatively related to R&D investment, but the relationship becomes positive when growth opportunities are present. The moderating effect, however, differs between independent family firms and family business groups. The positive influence that growth opportunities have on promoting R&D investment is diminished for affiliates of family business groups. These findings imply that family owners invest more in R&D when their family control goals are threatened by the loss of growth potential. The empirical results of this study and its behavioral decision-making model help to bridge the gap between the predictions of the family control perspective and agency theory in explaining R&D investment by family firms in an emerging economy.

1. Introduction

Despite the pervasiveness of family firms throughout the world, the implications of family control for value creation through R&D are still not completely clear (Peng & Jiang, 2009). The family control perspective presumes that family owners are primarily interested in maintaining their control of their firms (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007), and such goals may conflict with emphasizing R&D investment (Morck & Yeung, 2003). In some cases, family owners may fear that they lack the ability to handle the complex technological problems and organizational/strategic changes that R&D might bring (Gómez-Mejía et al., 2007; König, Kammerlander, & Enders, 2013; Morck & Yeung, 2004). Family control goals are expected to have negative effects on R&D investment in family firms (De Massis, Frattini, & Lichtenthaler, 2013). In contrast, agency theory suggests that although hired managers may act opportunistically by withholding resources from long-term value-creating activities with uncertain outcomes such as R&D (Hoskisson & Hitt, 1988; Latham & Braun, 2009), family owners' incentives are closely aligned with the long-term value of the firm (Jensen & Meckling, 1976).[5] Family owners may thus be expected to favor R&D investment that would help achieve economic goals (Lee & O'Neill, 2003).

These two perspectives have helped to identify the distinct attributes of family owners in R&D investment, but they use a one-size-fits-all approach, creating tension between whether family control goals or economic goals drive family owners' decisions on resource allocation to R&D. In contrast, the behavioral decision-making approach has a more adaptive viewpoint. It suggests that the risk preferences of decision makers greatly depend on their aversion to loss (Wiseman & Gómez-Mejía, 1998). One important consideration that determines whether family owners see themselves as in a loss or a gain position is the gap between aspirations and performance (Cyert & March, 1963). When firms' performance exceeds their aspirations, firms are in gain situations and tend to avoid risky choices, but when it falls short of their aspirations, they are in loss situations and inclined to make risky decisions (Kahneman & Tversky, 1979). This study follows behavioral studies highlighting loss aversions to investigate whether family control

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[5] This managerial agency perspective, suggesting that family owners can reduce agency problems caused by hired managers, differs from the agency problems caused by family members, such as the principal–principal conflicts and nepotism (Schulze et al., 2001), which can contribute to a low R&D investment. This aspect is consistent with the family control perspective.

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goals or economic goals motivate family owners' R&D investment decisions (Chrisman & Patel, 2012; Wiseman & Gómez-Mejía, 1998). Among various economic goals, this study treats growth as an important performance goal for family owners as it relates to firm survival, the ultimate family control goal. We conjecture that the loss of growth potential is a threat to family owners' control goals and is largely the basis of loss aversion (cf. Chrisman & Patel, 2012; Greve, 2008; Zellweger, Kellermanns, Chrisman, & Chua, 2012). We test this conjecture by investigating how family owners adjust R&D investment to changes in growth opportunities, as those opportunities have implications for future growth potential when they are exploited by means of R&D (David, Yoshikawa, Chari, & Rasheed, 2006; McGrath & Nerkar, 2004).

Firms operating in industries where growth opportunities are abundant can grow faster than those in adverse environments, but among those firms operating in such favorable environments there are substantial variations in performance/growth depending on their strategic actions (McDougall, Covin, Robinson, & Herron, 1994). We suggest that family firms making insufficient R&D investment become less capable to exploit growth opportunities available in an industry (McGrath & Nerkar, 2004). It represents nonconformity with growing environments (Zajac, Kraatz, & Bresser, 2000), which likely causes problems in actual and relative growth potential in the industry and consequently may become a threat to long-term family control goals particularly if it continues. In contrast, competitors investing in R&D may be in an advantageous position to exploit growth opportunities and as a result grow fast, surpassing those firms less capable to do so. As firms consider peers and competitors when forming their aspirations (Cyert & March, 1963), some firms in growing industries may be in a position of loss if growth opportunities remain unexploited. Therefore, we expect that family ownership encourages R&D investment in the presence of growth opportunities, as family owners who own a larger share of their firms have greater motivation to achieve growth and protect their family control goals. However, the value of R&D in low growth environments tends to be uncertain (Oriani & Sobrero, 2008). In such situations, cutting back on R&D may be a viable strategic choice, as family control goals may be unthreatened.

The relationship between family ownership and R&D investments mentioned above may differ in situations where family control is better protected, such as in affiliates of business groups. Business groups can better protect family control because they can subsidize affiliates (Chang & Hong, 2000; George & Kabir, 2008; Khanna & Rivkin, 2006) and thus contain many affiliated firms that are family controlled. In such contexts, family control and economic goals may severely collide and the convergence of those goals motivated by loss aversion may be delayed. Subsidies by business groups may compensate for the relatively feeble growth potential associated with insufficient R&D in growing industries. In turn, this may limit R&D investments necessary to exploit growth opportunities by individual affiliates.

These ideas can be efficiently tested in the context of South Korea, where ownership and control are highly integrated in family firms, and business groups are prevalent. Therefore, data on publicly listed Korean firms are used to search for influences of family ownership on R&D investment and to uncover how they might differ for family firms belonging to business groups. The findings of this study further clarify the nature of family owners' influence on R&D investment. Unlike the family control and agency theory arguments, our findings suggest that family owners' influence on innovation investment varies depending on the presence of growth opportunities, and that business group membership is an important boundary condition for the relationship. These findings imply that family owners behave like value-conscious owners when their control goals are threatened due to the potential loss of economic goals such as firm growth.

2. Theoretical background and hypotheses

2.1. Family owners and R&D investment

Research on family business[6] demonstrates that family owners who control a firm's management are salient in both developed and developing countries where corporate control by the markets is weak (Aguilera & Jackson, 2003; La Porta, Lopez-de-Silanes, & Shleifer, 1999). They often install a family member as CEO or in another senior management position (Villalonga & Amit, 2006). These family owners have non-financial motives, such as a need for belonging, preservation of family wealth, dynastic continuity, and family social status (Gómez-Mejía et al., 2007; Zellweger & Astrachan, 2008). Preserving family control of the firm is usually the primary goal among their non-financial values, as only in this way can the family continue to pursue its interests through the firm (Kim & Gao, 2013; Zellweger et al., 2012).

Family owners may be tempted to discourage R&D investments to emphasize family control goals. Often this occurs because they do not feel well equipped to deal with complex technology issues (Morck & Yeung, 2004). If so, they may find it desirable to limit the firm to applying technologies that family members themselves can understand. Beyond that, successful R&D often requires new arrangements and new routines. Such changes and experiments may be perceived as a threat to a family's control of their firm. Instead, family owners may prefer to emphasize alternative ways to maintain and expand their businesses, such as political lobbying (Morck & Yeung, 2003). Investment aversion may also arise from long-standing relationships that ensure the selection of officers who are beholden to the family or to a particular group closely related to the family owners (Schulze, Lubatkin, Dino, & Buchholtz, 2001). The majority of empirical studies (De Massis et al., 2013) investigating the relationship between family ownership and R&D investment report a negative relationship between the two in Canada (Morck, Stangeland, & Yeung, 2000; Muñoz-Bullón & Sanchez-Bueno, 2011), Europe (Munari, Oriani, & Sobrero, 2010; Sirmon, Arregle, Hitt, & Webb, 2008), Taiwan (Chen & Hsu, 2009), and the U.S. (Block, 2012).

At the same time, agency theorists predict that management by a controlling shareholder should often correlate with greater firm value because the owners' interests are well aligned with increasing the value of the firm. Such shareholders can alleviate the agency problems involved with hired managers and encourage the pursuit of long-term investments, such as R&D (Berle & Means, 1932; Berrone, Surroca, & Tribo, 2007; Jensen & Meckling, 1976). These are sensible arguments, but little empirical evidence supports the prediction that family firms should favor investment in innovation as a means of promoting long-term survival and growth. Instead, a few studies suggest that family owners promote R&D investment only under certain conditions. For example, Chrisman and Patel (2012) investigate manufacturing firms in the U.S. and report that the influence of family owners on R&D varies depending on the gap between aspiration and performance.

2.2. Growth opportunities and family owners' influence on R&D investment

Decision makers in behavioral studies are postulated to change their risk preferences depending on their loss or gain position, which is influenced by the gap between aspirations and performance (Cyert & March, 1963; Greve, 2003). Prior research extensively examined this behavioral decision-making thesis in a variety of settings, such as R&D investment and financial markets (Baum, Rowley, Shipilov, & Chuang, 2005; Greve, 2003). By applying this logic, this study focuses (among various performance facets) on growth, as it is a dominant performance goal for family owners (Grossman, 1993; Kim & Gao, 2013; Zellweger et al., 2012).

[6] As this study focused on family firms, “independent firms” refers to family firms that are not members of any business group, and “business groups” refers to family business groups.