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Disentangling the effect of family involvement on innovativeness and risk taking:

The role of decentralization

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Abstract

This study investigates the effect of family involvement on family firms' entrepreneurial behavior through decentralization. Borrowing from agency theory and using a sample of 145 entrepreneurs, this study contributes to entrepreneurship literature by providing a fine-grained explanation about how a decision-making mechanism such as decentralization influences the relationship between family involvement and innovativeness, and risk taking of family firms. Furthermore, this study demonstrates the importance of considering heterogeneity of family firms and the focal role of decentralization in spurring up firm-level entrepreneurship.

Keywords: Agency theory; family involvement; decentralization; innovativeness; risk taking

1. Introduction

Family firms are an important area of research in the past three decades (Gedajlovic et al., 2012). Family firms owe their importance to the world economy and unique organizational structure (Zahra et al., 2004), which consists of distinctive features like family involvement in management (FIM), generational succession (Kim & Gao, 2013) and strong family orientation (Uhlener et al., 2012). In recent years, many studies attempt to understand what makes family firms successful (Choi et al., 2015; Dyer, 2006; Gedajlovic et al., 2012). However, this stream of research still does not manage to establish family firms' relevance in entrepreneurship (Uhlener et al., 2012). The literature also presents conflicting findings about the effect of FIM on firm entrepreneurship and performance (Kim & Gao, 2013). These challenges may be mainly a product of studies looking at family firms vs. non-family firms (Chrisman & Patel, 2012), thus overlooking the fact that family firms are heterogeneous. Even studies that focus only on family firms fall short on investigating the effect of various antecedents on entrepreneurship and firm performance (Naldi et al., 2007).

One antecedent is family involvement, which has some prominence in family-business research (Kellermans et al., 2008). However, the mechanisms through which family involvement influences organizational outcomes such as entrepreneurship lack research (Gao & Kim, 2013). No studies explain clearly how variables such as decentralization (or low centralization), which are an important dimension of organizational culture (Zahra et al., 2004), usually become an outcome of family involvement (Lindow, 2013), and "get in between" family involvement and entrepreneurial engagement of family firms. Instead of investigating whether family firms are more entrepreneurial than non-family firms, this study provides a more appropriate research question to ask: What are the intervening variables that influence the relationship between family

firm's characteristics and entrepreneurship? The present study takes an important step in this direction. More specifically, this research investigates how decentralization mediates the relationship between family involvement and innovativeness, and risk taking.

This study contributes to the literature of family firms and entrepreneurship. First, unlike many studies comparing family vs. non-family firms (Chrisman & Patel, 2012; Naldi et al., 2007), this study looks solely at family firms and captures firm heterogeneity regarding family involvement. Second, this study offers a fine-grained explanation of processes such as decentralized structure to uncover the indirect relationship between family involvement and entrepreneurial behavior of family firms.

The organization of this research is as follows. Section 1 posits hypotheses about family entrepreneurship employing agency-theory underpinnings. Section 2 explains the research design and presents the findings. Section 3 discusses results and offers conclusions and suggestions for future research.

2. Theory and hypothesis development

2.1. Family involvement and innovativeness, and risk taking

The effect of family involvement on organizational outcomes builds on agency theory. Agency theory contends that agency costs arise because of self-interested individuals and their decisions oriented to their own preferences (Jensen & Meckling, 1976). Some agency theorists believe that family firms represent an ideal organizational form where the objectives of the owner align with those of the firm (Zahra, 2005). This close alignment leads to more effective decision-making that contributes to the continuation of the firm. Agency theorists also advocate that owners take a long-term and visionary approach to decision making because founders want

to create a legacy of their success or because they wish to maximize their families' wealth. Owner-managers must demonstrate commitment to firms' success through pursuing entrepreneurial opportunities and supporting innovations (Zahra, 2005).

With the separation of ownership and management in family firms, more people participate in decision making and thus agency costs occur because of different preferences and information asymmetries of the owner (principal) and the employed management (agent) (Schulze et al., 2001). These issues arise mainly because the individual managers have a short-term view and seek financial gains whereas the owners' preference is long-term interest and the sustainable development of the business. Besides these issues, agency costs in family firms occur because of relational and altruistic preferences (Mustakallio et al., 2002; Popo & Zenger, 2002). Families tend to keep control of the firm and wealth in the family rather than wanting to share the benefits of the business with the 'outsiders.' On the one hand, family firms should be less prone to agency problems when ownership and control are in the hands of a few select family members (Zahra, 2005). On the other hand, Dyer (2006) offers a countering view that family involvement leads to higher agency costs because of the conflicting goals of family members. In particular, parental altruism may give rise to the hiring of family members (i.e., nepotism) (Schulze et al., 2001; Sirmon & Hitt, 2003) which in turn is likely to lead to monitoring difficulties of their job performance (Dyer, 2006). Parental altruism opens the door for the failure of family members to monitor each other, which causes agency issues such as opportunism, shirking, and adverse selection (Dyer, 2006). These agency issues must have an influence on firm entrepreneurship and performance. In addition, firm strategy has both financial and socio-emotional implications for family wealth and the longevity of the family business which, in turn, lead these firms to be more conservative (Gomez-Mejia et al., 2007; Nieto et al., 2015).

Consequently, these firms may be hesitant to engage in corporate innovation (Le Breton & Miller, 2009) or to undertake business strategies that lead to higher variability in performance (i.e., risk) (Zahra, 2005).

The level of conservatism may be stronger if more family members participate in the day-to-day operations of a family firm because these members strive for preserving family wealth at any cost. Thus, the precautionary approach of family members tends to manifest in the decision-making process within a firm. Zahra et al. (2004) argue that family involvement hinders entrepreneurship within family firms. As family involvement in managing business increases, non-family members might feel like they are not part of key decisions and have less freedom to act (Zahra, 2005). Non-family employees face the daunting task of turning to family members prior to introducing a novel idea about improving the business. The feeling of having less voice and freedom to act in a firm may eventually lead to losing these employees. This loss, in turn, would cause an organization to lack valuable sources of ideas that could spur innovativeness and entrepreneurial risk-taking (Zahra, 2005). Empirically, Chen and Hsu (2009) confirm these claims by showing that family firms are less innovative than non-family firms.

H1: Family involvement relates negatively to innovativeness.

H2: Family involvement relates negatively to risk taking.

2.2. *The mediating effect of decentralization*

Decisions in small businesses generally hinge on business owners' philosophies and their management style. Therefore, in small firms, delegating business tasks and applying the correct amount of control (i.e., high decentralization) constitute a challenge. Family firms gain prominence for their centralized organizational structure (low decentralization), which leads to

even tighter coordination and control (Zahra et al., 2004). Supporting this view, previous research portrays family firms as restricting family members' involvement in the firm's decision-making process (Kellermanns & Eddleston, 2007). No literature exists regarding how family involvement affects decentralization. However, building on agency theory, several reasons support why having a larger number of family employees participating in business decisions should lead to less decentralized decision-making in operations. First, having a higher level of family involvement can cause more divergence in owners' goals, which may escalate agency costs. Second, when a larger proportion of family members are employees, the entrepreneur faces a dual concern: providing for employed family members and running a successful business. For family firms, offering continuous employment to family members tends to take precedence over achieving firm performance. Therefore, a way to satisfy these dual goals for the business owner is to exercise some care when granting autonomy to employees to safeguard family wealth and to ensure "succession of the business" (Miller & Le Breton Miller, 2006). The discussion shows that higher family involvement in family firms should lead to lower decentralization (i.e., high centralization).

Previous studies report that low decentralization of decision-making impedes the use of imagination by employees and reduces the probability of finding creative solutions to problems within a firm (Caruana et al., 1998). In the context of family firms, low decentralization also concentrates the power in the hands of select individuals. This concentration of power leads to organizational rigidity, which impedes the exchange of ideas by employees, and thus has a suppressing effect on innovativeness (Zahra et al., 2004). Previous studies offer consistent empirical evidence of the stifling effect of centralization (i.e., low decentralization) on entrepreneurship (Caruana et al., 1998; Zahra et al., 2004).

Taken together, these relationships point out to the corollary that family involvement may have an indirect effect on entrepreneurial risk-taking and innovativeness through decentralization. High family involvement creates higher agency costs that lead to a lower degree of decentralization. In turn, decentralization has a positive effect on risk taking and innovativeness. Overall, this study contends that higher family involvement will lead to lower entrepreneurial risk-taking and innovativeness through decentralization. Figure 1 depicts the model of this study.

H3: Decentralization mediates the relationship between family involvement and innovativeness, so that family involvement has a negative indirect effect on innovativeness

H4: Decentralization mediates the relationship between family involvement and risk taking, so that family involvement has a negative indirect effect on risk taking.

Figure 1 here.

3. Method

3.1. Sampling

The sample population for the questionnaire study included family-owned SMEs operating in three main sectors (manufacturing, retailing, and hospitality) in England. The study used probability sampling to test the research model. Authors selected 1,000 family-owned SMEs from the UK Business Directory of Small Business Federation and other published small business directories with the aim of achieving a minimum of 150 responses in order to test the posited model. The qualification question: “Do you consider this firm a family business?” (Naldi et al., 2007) brought the final sample to 145 business owners who agreed to be in a face-to-face

structure interview or “structured questionnaire”. Selected firms were either micro business (2 to 9 employees) or small businesses (10 to 49 employees).

3.2. *Measures and data analysis*

The family involvement, as an independent variable, refers to the degree of family members’ involvement in ownership, board of directors, or management (Liang et al., 2013). Habbershon et al. (2003) developed the term familiness to define the unique combination of involvement and interaction between the family and the business that creates a distinctive firm-level bundle of resources and capabilities. Even though the concept of familiness may be difficult to capture, previous studies show that family businesses differ from non-family businesses along several dimensions (Ensley & Pearson, 2005). These differences are particularly relevant concerning corporate governance—because corporate governance is at the top of the organization—and particularly in board of directors—where family members and non-family members meet and interact in formal circumstances to evaluate current performance and to take strategic decisions.

Family involvement is a complex measure that several studies capture in a different way. The most common operationalization of this concept is the percentage of family members involved in top management teams or board of directors (Liang et al., 2013). Hence, this study adopts a measure that resembles the one by Liang et al. (2013), and estimates the independent variable—family involvement (FAMINV)—as the percentage of family employees to total employees. This calculation captures family involvement better than a simple count of family employees because the effect of 5 family members in decision making will be much stronger in a firm with 10 than in a firm with 30 employees.

This study includes two outcome variables: innovativeness (INNOV) and risk taking (RISK). These variables are sub-dimensions of the entrepreneurial-orientation construct (Naldi et al., 2007). Innovativeness links with seeking creative solutions to problems and needs leading to transformational change. Risk-taking refers to the willingness to commit significant resources to opportunities, which have a reasonable chance of costly failure (Lumpkin & Dess, 1996). INNOV includes five items that come from Covin and Slevin (1989), Hurt et al. (1977), and Miller and Friesen (1983). RISK encompasses seven statements adapted from Miller (1983), and Covin and Slevin (1989).

The moderating variable—decentralization (DECENTRAL)—relates to devolving decision-making power to the lower levels of hierarchy rather than concentrating authority at the top and around few individuals; empowering more people to vouch for their ideas and taking initiatives to stimulate entrepreneurship in firms (Covin & Slevin, 1989). Five statements adapted from Thomas and McDaniel (1990) form the basis for DECENTRAL. This project uses a seven-point Likert-type scale ranging from strongly disagree to strongly agree for the above statements pertaining to dependent and moderating variables. Cronbach's alpha for DECENTRAL, INNOV, and RISK scales have acceptable internal consistency values (0.72, 0.87, and 0.81, respectively) according to the 0.70 threshold value of Nunnally (1978).

The study controls for the effect of firm age, firm size, and industry type. Firm age (AGE) is the number of years since founding (Liang et al., 2013). The number of employees determines firm size (SIZE). Measurement of industry type (IND) relies on a categorical variable. This study includes seven distinct industry categories, namely: retailing, wholesale, restaurants, cafes, fast food, professional and services, and manufacturing.

This study estimates a path analytic model with STATA 13.0. The study conducts the mediation analysis with *sgmediation* routine that uses Sobell-Goodman procedure (Preacher & Hayes, 2004). This study uses the bootstrapping method with case resampling and confidence intervals with percentile estimates for the mediation analysis (Preacher & Hayes, 2004)

4. Findings

Table 1 reports descriptive statistics of the present study. The analysis reveals that the mean values of INNNOV and RISK statements are 4.41 and 4.18, respectively. The degree of family involvement is approximately 47%. The average family firm in this sample is 10 years old and has about 10 employees. Intercorrelations and low variance inflation factor (VIF) values ($VIF < 1.5$) among independent and control variables indicate that potential multicollinearity is not an issue.

Table 1 here.

Table 2 shows the results of the model. The relationship between FAMINV and INNOV is negative but not significant, which does not offer support for H1. The model with FAMINV and control variables explains 30% of the variance in INNOV. Findings demonstrate that the relation between FAMINV and RISK is not significant, which does not lend support for H2. Overall, the model with FAMINV and controls AGE, SIZE, and INDUSTRY accounts for 29% of the variance in RISK.

Because the effect of FAMINV on two entrepreneurship variables is not significant, the present study tests for *indirect only* mediation (Zhao et al., 2010). Mediation analysis reveals that FAMINV relates negatively to DECENTRAL ($b = -1.96, p < 0.001$), which in turn relates positively to both INNOV ($b = 0.36, p < 0.01$) and RISK ($b = 0.32, p < 0.01$). An evaluation of

the indirect effect of DECENTRAL reveals that FAMINV has a negative indirect effect on INNOV (-1.01, $p < 0.001$) that offers support for H3. In the same fashion, DECENTRAL mediates the relationship between FAMINV and RISK, where FAMINV has a negative indirect influence on RISK ($b = -0.95$, $p < 0.001$). Interestingly, the ratio of indirect effect to total effect (i.e., the sum of direct and indirect effects) is 67% for INNOV and 85% for RISK, which means that FAMINV affects INNOV and RISK mostly through DECENTRAL rather than directly. Table 2 also reports that the total effect of FAMINV on two outcome variables (INNOV and RISK) is significant because of the mediation effect of DECENTRAL.

This study conducts an additional analysis to ensure that the results are robust. This study assesses whether firms that owner-operators manage versus firms with passive owners or employee managers demonstrate higher innovativeness and risk-taking. Findings indicate that family firms who have an owner-operator in charge are less entrepreneurial than their two counterparts. More importantly, the mediation of DECENTRAL on two outcome variables remains significant.

Table 2 here.

5. Discussion

This study demonstrates that family involvement has no direct influence on innovativeness and risk taking of family firms. At a first glance, findings of this project do not support results of Zahra (2005). However, results of the present study reveal that decentralization is an important antecedent of innovativeness and risk-taking, which coincides with the findings of Caruana et al. (1998). Consequently, because family involvement has a negative effect on

decentralization, the total effect of family involvement on innovativeness and risk taking is significant and negative.

This study contributes to the literature of family firms and entrepreneurship. Firstly, this research uses family involvement, an important dimension that previous research neglects, to explain the entrepreneurial behavior of family firms. Secondly, this study demonstrates how decentralization mediates the indirect relationship between family involvement and entrepreneurial behavior of family firms. Apparently, no direct relationship between family involvement and entrepreneurial behavior of family firms exists. However, when family firms undergo a decentralization process, the involvement of family members in decision-making and operations of the firms affects both innovativeness and risk-taking negatively. This effect suggests that family firms can gain from the decentralization. However, decentralization could be of benefit to family firms only if they reduce the family involvement and shift away from the traditional management. A family-involved approach to decision-making and operations might not encourage diverse and creative representation in the strategic direction and activities of firms and thus hinder innovation. A family-dominated approach might lead to a more cautious and traditional attitude towards risk-taking, impeding a firm's ability to reap the benefits of opportunities in the market.

However, this study has some limitations. First, the study applies the model in a large metropolitan area of a major developed country (the United Kingdom). Entrepreneurs in developing countries may have different motivations to engage in business ownership, which may influence the results of the present model. Therefore, future studies should test the model in developing countries. Second, this study uses path analysis, which rests on linearity assumption. Therefore, the results do not show how risk taking and innovativeness changes in the absence of

some conditions such as firm age and firm size. Future studies should use comparative qualitative analysis to identify a set of conditions that lead to innovativeness and risk taking. Lastly, although the measure of family involvement captures the scope of family involvement, this scope does not consider the depth of family involvement. Future studies should employ measures that include both the scope (percentage of family involvement) and the depth (degree of involvement in key operating functions such as sales, operations, accounting, etc.). Future studies should also consider family orientation, organizational culture, entrepreneurial orientation, and firm performance to offer a more holistic picture of how entrepreneurship operates in family firms. Looking into additional factors will allow getting into “the blackbox” of entrepreneurial orientation of family firms.

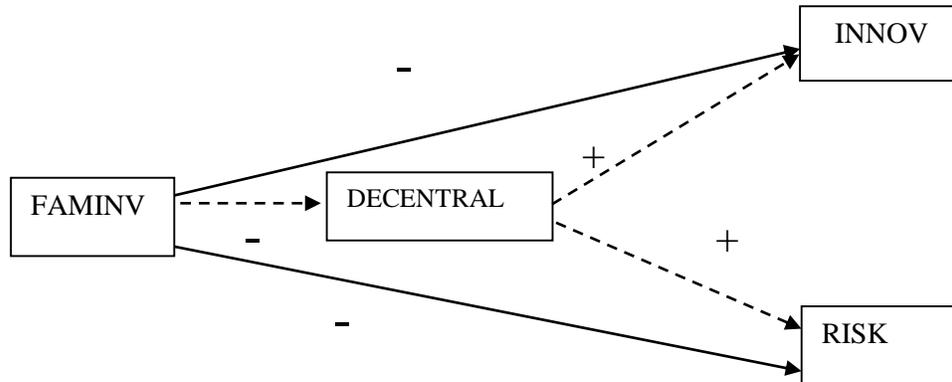
References

- Chen, H. L., & W. T. Hsu (2009). Family, ownership, board independence, and R&D investment. *Family Business Review* 22(4), 347–362.
- Choi, Y. R., Zahra, S. A., Yoshikawa, T., & Han, B. H. (2015). Family ownership and R&D investment: The role of growth opportunities and business group membership. *Journal of Business Research*, 68(5), 1053–1061.
- Chrisman, J. J., & Patel, P. (2012). Variations in R&D investments of family and non-family firms: Behavioral agency and myopic loss aversion perspectives. *Academy of Management Journal*, 55(4), 976–997.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87.
- Dyer, W. G. (2006). Examining the “family effect” on firm performance. *Family Business Review*, 19(4), 253–273.
- Gedajlovic, E., Carney, M., Chrisman, J. J., & Kellermanns, F. W. (2012). The adolescence of family firm research: Taking stock and planning for the future. *Journal of Management*, 38(4), 1010–1037.
- Hurt, H. T., Joseph, K., & Cook, C. D. (1977). Scales for the measurement of innovativeness, *Human Communication Research*, 41, 58–65.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kellermanns, F. W., & Eddleston, K. A. (2007). A family perspective on when conflict benefits family firm performance. *Journal of Business Venturing*, 60(10), 1048–1057.

- Kim, Y., & Gao, F. Y. (2013). Does family involvement increase business performance? Family-longevity goals' moderating role in Chinese family firms. *Journal of Business Research*, 66(2), 265–274.
- Le Breton-Miller, I., & Miller, D. (2009). Agency vs. stewardship in public family firms: A social embeddedness reconciliation. *Entrepreneurship Theory and Practice* 33(6), 1169–1191.
- Lindow, C. M. (2013). *A strategic fit perspective on family firm performance*. Wiesbaden: Springer.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Miller, D., & Le Breton-Miller, I. (2006). Family governance and firm performance: Agency, stewardship, and capabilities. *Family Business Review*, 19(1), 73–87.
- Miller, D., & Friesen, P.H. (1983). Strategy-making and environment: The third link. *Strategic Management Journal*, 4(3), 221–235. doi:10.1002/smj.4250040304
- Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: Effects on strategic decision making. *Family Business Review*, 15(3), 205–222.
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family Business Review*, 20(1), 33–47.
- Nieto, M. J., Santamaria, L., & Fernandez, Z. (2015). Understanding the innovation behavior of family firms. *Journal of Small Business Management*, 53(2), 382–399.
- Nunnally, J. (1978). *Psychometric Methods*. New York: McGraw-Hill.

- Poppo, L., & Zenger, T. (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal*, 23(8), 707–725.
- Preacher, K. J., & Hayes, A.F. (2004). SPSS and SAS Procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, 36(4), 717–731.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, 12(2), 99–116.
- Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27(4), 339–358.
- Thomas, J. B., & McDaniel Jr., R. R. (1990). Interpreting strategic issues: Effects of strategy and the information processing structure of top management teams. *Academy of Management Journal*, 33(2), 286–306.
- Uhlaner, L. M., Kellermanns, F. W., Eddleston, K., & Hoy, F. (2012). The entrepreneuring family: A new paradigm for family business. *Small Business Economics*, 38, 1–11.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, 18(1), 23–40.
- Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture. *Entrepreneurship Theory and Practice*, 28(4), 363–381
- Zhao X., Lynch, J., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.

Figure 1. Antecedents of innovativeness and risk taking



Notes: FAMINV= Family Involvement, DECENTRAL= Decentralization, INNOV=Innovativeness, RISK=Risk taking; ---- Dashed lines denote a mediating effect

Table 1. Descriptive Statistics

Variables	Mean	SD	1	2	3	4	5	6
1. INNOV	4.41	1.87	1					
2. RISK	4.18	1.57	0.83*	1				
3. FAMINV	0.46	0.35	-0.28*	-0.25*	1			
4. DECENTRAL	3.90	1.57	0.44*	0.45*	-0.48*	1		
5. FIRMAGE	10.86	10.04	-0.26*	-0.24*	-0.01	-0.26*	1	
6. SIZE	9.81	24.25	0.15	0.14	-0.30*	0.09	0.20*	1

Notes: SD= Standard Deviation, * $p \leq 0.05$.

Table 2. Family Involvement, Decentralization, Innovativeness and Risk-taking

Hypothesized Path	Direct Effect	Indirect Effect (through DECENTRAL)	Total Effect	Supported
H1:FAMINV→INNOV	-0.67 (-1.33)	-	-	NO
H2: FAMINV → RISK	-0.01 (-0.01)	-	-	NO
H3: FAMINV→DECENTRAL→INNOV		-1.01 (-3.69)***	-1.68 (-3.47)**	YES
H4: FAMINV→DECENTRAL→RISK		-0.95 (-3.98)***	-0.96 (-3.03)**	YES

Notes: t-values appear in parentheses; Values in parenthesis for H3 and H4 are z-values; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$;