Industry and Information Asymmetry: The Case of the Employment of Non-Family Managers in Small and Medium-Sized Family Firms

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Abstract:

As family firms begin to professionalize, they face an important crossroads in deciding whether to employ non-family managers. To preserve socioemotional wealth and minimize agency costs, family owners may resist employing non-family managers. However, industry sector may play a role that influences the employment of non-family managers. We argue that the family's reluctance will be stronger in industries where information asymmetries make monitoring managers more difficult. For industries where monitoring is easier, the benefits of employing non-family managers may offset the loss in socioemotional wealth and increase in agency costs. Results based on a sample of 965 small and medium-sized retail and manufacturing firms confirm our predictions.

Keywords: family firm | managers | employment

Article:

Introduction

One of the most important decisions that family firms have to make as they grow is the extent to which they will employ non-family managers (Chua, Chrisman, and Sharma 2003).1 This decision is important because the decision could fundamentally affect the relationship between the family and the firm. On one hand, non-family managers may bring in professional knowledge and skills that family members might lack (Gedajlovic and Carney 2010) since the non-family managerial labor pool is larger and possibly more qualified than the family labor pool (Gedajlovic and Carney 2010; Schulze et al. 2001). These skills mean that non-family managers can contribute to professionalization2 and performance objectives (e.g., Stewart and Hitt 2012;

Tsui-Auch 2004). Employing non-family managers may also represent a strategy of conforming to prevailing market and industrial norms, especially when conformity is critical to firm survival (Miller, Le Breton-Miller, and Lester 2013). Conversely, employing non-family managers may be perceived as giving up control of the firm. Thus, family firm owners generally resist bringing in outsiders, and usually prefer to hire family managers (Chrisman, Memili, and Misra 2014). The well-documented reasons for—and against—employing non-family managers suggests that family owners face a major dilemma that has not yet been fully examined by prior literature.

Family owners often frame decisions according to their effect on socioemotional wealth (Gómez-Mejía et al. 2011). Socioemotional wealth (SEW) refers to the nonfinancial benefits of firm ownership that serve the family's affective needs for identity, influence, exclusive treatment of family members, and maintaining the family dynasty (Gómez-Mejía et al. 2007). Because non-family managers are unlikely to be motivated by those objectives, family owners may feel that employing non-family managers instead of family managers would reduce socioemotional wealth. Indeed, because they are not bonded to the family, non-family managers are more likely to behave opportunistically (Chrisman, Chua, and Litz 2004; Jensen and Meckling 1976), instead of behaving in a way that is in line with the family's objectives. Therefore, employing non-family managers might create an agency problem (Chrisman, Chua, and Litz 2004; Fama and Jensen 1983; Jensen and Meckling 1976).

To minimize the risk of non-family manager opportunism, monitoring is necessary. If it were possible to perfectly and costlessly monitor the non-family manager, then the family would perceive their employment as less of a threat to SEW. However, when the relationship between managerial behavior, firm productivity, and firm performance is complex, monitoring is difficult and expensive (Eisenhardt 1989).3 Thus, to fully understand employment decisions in family firms, contextual factors that impact the difficulty of monitoring must be considered.

What the family firm literature does not explain is whether the value of non-family managers' knowledge and skills can offset the negative SEW consequences and any related agency cost increase. This question is important because the extant literature shows that, in general, family firms resist making decisions that might reduce SEW (Gómez-Mejía et al. 2007) or increase agency costs (Ilias 2006). Employing non-family managers leads to a perceived decrease in SEW. In particular, employing non-family managers may compromise the family's control and influence; it makes it more difficult to behave altruistically toward family members and may confuse the family's trans-generational succession plans (Berrone, Cruz, and Gómez-Mejía 2012). Although non-family managers' skills and knowledge can lead to positives, such as improving firm reputation and/or performance (Stewart and Hitt 2012; Tsui-Auch 2004), those outcomes are often lower priorities than ensuring that the bond between the family and the firm is strong. Indeed, maintaining control of the firm is a top priority for the family. We submit that the family will only consider employing non-family managers when they believe that proper controls are in place to minimize non-family manager opportunism.

The purpose of the present study is to develop and test a model of the employment of non-family managers by considering how family owners weigh the economic and noneconomic gains, and possible SEW losses, of such decisions. In the present study's exploration of the contextual factors that influence the employment of non-family managers, information asymmetry

influencing the relative advantages and disadvantages of employing non-family managers is considered. This paper's main argument is that when information asymmetry can be controlled, there is less risk involved with hiring non-family managers. More specifically, if the industry allows less monitoring complexity, and in turn less information asymmetry between non-family managers and family owners, the agency costs associated with employing non-family managers will be lower, making them relatively more attractive job candidates to family owners. To test the predictions, a large national sample of small and medium-sized enterprises (SMEs) covering the 2004–2010 time period was tested.

This paper contributes to the literature by providing evidence that family owners do not make decisions solely based on concerns for SEW, but rather, they consider trade-offs between noneconomic and economic factors in order to maximize their utility. The paper also contributes to the literature by highlighting that decisions to employ non-family managers are a function of the difficulty in assessing the extent to which they exert effort commensurate with their presumed higher ability. Finally, the study contributes to a better understanding of how the interplay between factors, such as the nature of the industry and forms of governance, distinguishes family and non-family firms, impacts agency problems, and firm decision making. The remainder of the paper includes development of the model and hypotheses, followed by a discussion of the methodology and the results. The study concludes with a discussion of several contributions, limitations, and implications for future research.

Theory and Hypotheses

Broadly speaking, there are at least two reasons why family firms will resist the employment of non-family managers: the instinct to preserve SEW, and the desire to minimize agency costs. Those reasons are discussed below.

Preserving Socioemotional Wealth

At the margin, family owners are expected to attach greater weight to family-centered non-economic goals (Chua, Chrisman, and Bergiel 2009; Chrisman et al. 2012a) than to economic goals (e.g., Zellweger and Astrachan 2008), because the achievement of the former creates SEW for the family, whereas the loss of SEW can result in diminished intimacy, lowered status, and the inability to meet family expectations (Berrone, Cruz, and Gómez-Mejía 2012; Gómez-Mejía et al. 2011). Thus, family owners are often willing to take measures to preserve SEW even at the expense of economic performance.

Unless and until a family firm grows quite large, there are a limited number of managerial positions and these are often reserved for family members (Lee, Lim, and Lim 2003). Hiring non-family managers reduces the ability to fill positions with family members, thereby limiting important aspects of owners' SEW, such as the ability to maintain the family's dynasty (Gersick et al. 1997; Jaffe and Lane 2004), values (Klein, Shapiro, and Young 2005; Salvato and Melin 2008; Zellweger and Astrachan 2008), internal harmony (Lambrecht and Lievens 2008), and capacity to be altruistic toward family members (Lubatkin, Ling, and Schulze 2007; Schulze et al. 2001; Steier 2003). Therefore, barring perceived threats to the viability of the firm, in

which case the socioemotional and financial wealth of the family would both be compromised, family firms are likely to avoid hiring non-family managers.

Minimizing Agency Costs

Agency problems, which may arise when information asymmetries and a misalignment of interests exist between two or more individuals in a cooperative situation (Jensen 1994; Jensen and Meckling 1976), also explain family owners' reluctance to hire non-family managers. In a business setting, owners hire and delegate authority to managers to perform a set of activities on the owners' behalf (Ross 1973). Thus, owners must incur agency costs to monitor managers to minimize behaviors that do not contribute to the achievement of owners' goals (Chrisman et al., 2014). However, the pursuit of noneconomic goals by family firms makes aligning interests among family owners and non-family managers more difficult (Chua, Chrisman, and Bergiel 2009). Family firms may need to pay higher compensation than non-family firms to attract capable non-family managers.

Although agency problems may occur between family owners and family managers owing to unreciprocated altruism bestowed on family managers and a lack of self-control on the part of family owners (Schulze et al. 2001), the received wisdom is that to the extent that family managers are utilized, agency costs will generally be lower in family firms than in non-family firms (Jensen and Meckling 1976; Fama and Jensen 1983; Pollak 1985). The presence of reciprocal altruism, a mutual moral value that motivates individuals to act in a manner that would benefit others without expecting any direct or immediate return (Schulze, Lubatkin and Dino 2002), means that the interests of family managers are more likely to be aligned with the interests of family owners. As reciprocal altruism facilitates bonding through trust, communication, respect, and love (Lubatkin et al. 2005), family involvement can foster collectivistic behaviors rather than self-serving behaviors (Corbetta and Salvato 2004).

Conversely, non-family managers do not share affinity bonds with family owners and are therefore more likely to have and act on conflicting interests. Moreover, even when altruism is asymmetric or conflicts occur among family members, family owners who are able to exercise some degree of self-control are likely to have advantages in monitoring family managers as opposed to non-family managers because of a long history of familiarity and the ability to impose family as well as firm sanctions on the former (Pollak 1985).

In summary, the probability of agency problems is lower when the firm uses family managers rather than non-family managers. Therefore, from both an agency cost and a SEW perspective, family owners should prefer family managers over non-family managers. Finally, as the family's share of firm ownership increases, their ability to influence firm decision making without recourse to the wishes of other stakeholders also increases (Carney 2005). In other words, family owners have the power to act on their preferences. Thus, as their share of firm ownership increases, the family should have greater power to engage in actions that meet their goals of preserving SEW and avoiding agency costs. This is reflected in the first hypothesis:
- H1: The extent of firm ownership held by a family is negatively associated with the extent of non-family management.

Monitoring Non-Family Managers in SMEs

Although family firms that employ family managers may benefit from lower agency costs (Chrisman, Chua, and Litz 2004; Shleifer and Vishny 1997), on average, non-family managers may have greater abilities than family managers. Thus, if the agency costs associated with monitoring managers vary by industry, the relative desirability of employing family or non-family managers may also differ by industry (Eisenhardt 1989; Gedajlovic and Carney 2010).

Generally speaking, hiring from the larger labor pool of non-family managers may lead to a stronger and more skilled management team (Carney 2005; Schulze et al. 2001). Therefore, the relative attractiveness of family and non-family managers may come down to a trade-off not between ability and effort, but between the marginal costs and benefits of obtaining the maximum effort from the higher-ability non-family managers. As Pollak (1985) notes, family management is more desirable when information asymmetries make monitoring managers more complex, owing to the superior ability of family owners to predict and control the behavior of family managers. In cases where the distribution of information is highly asymmetric and the cause-effect relationship between behavior and performance is difficult to understand, the monitoring advantage in employing family managers may outweigh the associated managerial skill disadvantage. Thus, family owners are likely to avoid hiring non-family managers in such situations. Conversely, as monitoring becomes more and more straightforward, at some point the advantage in monitoring family managers over non-family managers no longer outweighs the associated managerial skill disadvantages. Thus, in industries where monitoring managers' performance is more complex, family firms should have fewer non-family managers than industries where monitoring performance is less complex.

The contract between owners and managers should stipulate how managerial performance will be measured, evaluated, and rewarded (Chua, Chrisman, and Bergiel 2009). Likewise, the characteristics of the tasks to be performed by managers influence the cost of monitoring (Eisenhardt 1989; Ouchi 1979). When understanding how managerial behavior translates into firm performance is difficult, information asymmetries make the monitoring costs of owners higher than they would otherwise be. The reason is that, in such situations, owners have a harder time understanding if and to what extent the actions of managers have "caused" firm performance, which makes measuring managers' performance harder as well. In situations where the relationship between behaviors and performance is unclear, the probability of managers concealing negative behavior, manipulating data, or attributing poor performance to uncontrollable events may increase (cf., Gómez-Mejía, et al. 2001; Walsh and Seward 1990). When casual ambiguity exists with regard to the actions that lead to higher or lower performance, using the relationships between past behavior and performance to predict the effect of expected future behavior of managers on performance is more tenuous than when those relationships are better understood. Finally, when opportunistic behavior is more difficult to detect, the expected payoffs from such behavior should increase, meaning that the probability they will occur can also be expected to rise. Consequently, as expressed below, the incentive of family owners to employ family managers should vary according to the difficulty of monitoring managers.

It should be noted that monitoring difficulty is only salient in strengthening/mitigating agency issues related to information asymmetry and bounded rationality. It is not necessarily connected to SEW, as the latter is more about principals' willingness rather than ability to supervise agents. This would also suggest that the moderating effect of industrial sector—which is connected to agency issues—is bounded to its scope. In this regard, industrial sector strengthens/mitigates the negative effects to the extent that agency concerns caused by information asymmetry becomes more/less salient, whereas SEW concern remains unaffected.

- H2: Difficulties in monitoring moderate the link between family ownership of a firm and the extent of non-family management, such that the negative relationship becomes stronger in industries where the association between managerial behavior and firm performance is harder to measure.

Methods

To test the aforementioned hypotheses, an existing database that includes the responses to annual surveys of clients of the Small Business Development Center (SBDC) program was utilized. Responses from 67,976 SBDC clients were received from annual surveys conducted from 2004 to 2010 throughout the United States. The questionnaires were directed to the principal manager of the firms who, in most cases, was also the primary owner. The effective response rate was approximately 18 percent.

To develop theory and test the hypotheses regarding different industries, firms in retail and manufacturing industries, where the distinctions of interest were clear-cut, were compared. Indeed, the ability to measure and hence monitor managerial performance is expected to vary considerably across these two industry sectors because of differences in their productive outputs (e.g., Klassen, Russell, and Chrisman 1998), which have been recognized for many years (e.g., Betancourt and Gautschi 1988; Dewar and Hage 1978; Taylor 2000). Although variations and exceptions exist, in general three inter-related characteristics distinguish retail and manufacturing industries: intangibility, standardization, and simultaneity (cf., Klassen, Russell, and Chrisman 1998).

In retailing, service is a more important part of the total product than in manufacturing, which means the bundle of attributes customers purchase is more intangible, the product is less standardized, and some aspects of production and consumption occur simultaneously. By contrast, in manufacturing where the end product is physical in nature, production is tangible, can be performed independently, and is easier to standardize. As tangibility, standardization, and the independence of production and consumption increase, information asymmetries regarding the relationship between managerial behavior and firm performance should decrease because the variables that influence performance are more susceptible to measurement and hence planning and control (cf., Eisenhardt 1989). Selecting such polar ends of the industry continuum should be appropriate for testing the theoretical contentions made above. Furthermore, the present study's focus on two industries is consistent with prior work on the effect of industry on strategic decision making (e.g., Henderson, Miller, and Hambrick 2006).

Respondents were asked to specify the firm's industrial affiliation. As noted above, this study focused on retail and manufacturing firms. Retail firms, and not service firms, were selected

because as a group retailers are more homogeneous in their characteristics. Nevertheless, the results were robust when substituting service firms for retailing firms. Responses from firms that were outside those two industry sectors were excluded, reducing the sample size to 22,087 firms. Consistent with the size cut-offs used in previous SME and family business studies (e.g., Çakar and Ertürk 2010; Miller, Le Breton-Miller, and Scholnick 2008), only firms employing between 20 and 100 employees were included. Most SBDC firms employ fewer than 20 employees, and thus the sample size was further reduced to 2,129 firms. Next, firms without family involvement in ownership were excluded because, by definition, these firms have no family managers. This reduced the sample to 1,516 firms. As the purpose was to study firms with management teams, respondents with less than two managers were excluded, leaving 1,507 firms. Finally, responses with missing data on the dependent, independent, control, and instrumental variables and those who did not start a business were excluded. Overall, the cross-sectional, multi-year and multi-state sample consisted of 965 firms.

Before conducting the primary analysis, t-tests compared early and late respondents to the survey along the variables of interest. Results indicated that nonresponse bias does not appear to be a problem (Kanuk and Berenson 1975). Furthermore, to ensure the robustness of the results, the analysis was replicated by systematically relaxing the above restrictions as well as by using different restrictions.

It should be noted that our database was cross-sectional, and not longitudinal in nature, as we did not examine the intra-firm evolution in the temporal dimension. Instead, we compared firms with high and low family ownership, and between firms in manufacturing and retail industrial sectors. Family SMEs were focused on for several reasons. First, in contrast to extremely small firms, SMEs are more likely to be at a stage where owners need to decide whether to employ non-family managers. Second, in contrast to large firms, SMEs frequently lack many of the formal systems and processes to monitor managers. Third, owing to their modest size, SME managers are more likely to supervise frontline operations (Cromie, Stephenson, and Monteith 1995), which makes the ability to monitor their behavior more critical and complicated. Fourth, such firms may experience substantial trade-offs in choosing between family and non-family managers (Chrisman, Memili, and Misra 2014). Fifth, the family owners often hold majority ownership and executive position(s) with high discretion power (Carney 2005). Hence, family's continued control and influence through ownership and management can be critical in such organizations. As hiring non-family managers can affect all these dynamics tremendously, such decisions are expected to be challenging to make. Sixth, we also expect that complex agency issues—such as principal-principal (PP) problems—are less likely to occur in SMEs compared to larger firms. This is because SME context allows close monitoring and control.

Seventh, and finally, PP problems, such as tunneling, which is the transfer of assets and profit out of firms as excessive executive compensation or insider trading and dilutive share issues, is less likely to occur in SMEs due to their size limits. Altogether, SMEs are an appropriate sample for this study because they allow us to concentrate the analysis on the focal principal-agent problem.

Dependent Variable

Because the size of the management team can vary, the *proportion of non-family managers to total managers* was used instead of the absolute number of non-family managers in the firm as the dependent variable. This measurement captures whether, and to what extent, a family-owned firm hires non-family managers. On average, approximately 55.7 percent (standard deviation = 30.2 percent) of the managers of the firms in the sample were from outside the family. The distribution indicates that our sample contained enough variance to ensure that not all observations are family managed or non-family managed.

Independent Variable

The *family ownership* continuous variable was measured as the percentage of the business owned by members of the owning family. The mean of family ownership was 89.6 percent (standard deviation = 22.2 percent).

Moderators

Among the 965 observations, 582 (60.3 percent) respondents indicated their firms compete in manufacturing and 383 (39.7 percent) indicated their firms compete in retailing. A dummy variable was used to measure *industry*, with retail firms coded as one and manufacturing firms coded as zero. The industry moderator was multiplied by the family ownership variable to obtain the interaction variable necessary to test H2.

Controls

Consistent with previous studies (e.g., Chrisman, Chua, and Litz 2004; Schulze et al. 2001), *firm age* and *size* were controlled. Firm age refers to the number of years that a firm has been in operation. Firm size was measured by both the log of firm sales and the log of total employees in the current fiscal year. *Prior firm productivity* was also controlled because low firm productivity may signal the inferiority of current executives, who may be family managers, thus motivating firm owners to actively seek to hire non-family managers. Firm productivity was operationalized by the log of total firms sales divided by the total number of employees in the previous fiscal year.

In addition, the *year* in which the survey was conducted was controlled using a dummy variable. This control accounted for the possibility of periodic fluctuations. Finally, each firm's *state* was controlled to account for possible differences in geographic regions. Descriptive statistics for all variables are provided in Table 1.

Table 1. Descriptive Statistics and Correlation Matrix

	Mean	S. D.	1	2	3	4	5	6	7
1. Non-family Management (percent)	55.71	30.20	1.00						
2. Family Ownership (percent)	89.56	22.24	−0.21	1.00					
3. Retail Industry	0.40	0.49	−0.11	0.15	1.00				
4. Past Firm Productivity	11.07	1.20	0.10	−0.07	−0.30	1.00			
5. Firm Age	22.88	23.01	0.03	0.08	−0.23	0.20	1.00		
6. Annual Sales (logged)	14.71	1.20	0.17	−0.13	−0.30	0.85	0.24	1.00	
7. Employees (logged)	3.57	0.43	0.17	−0.06	−0.09	0.07	0.26	0.39	1.00

All correlations above |0.06| are significant at .05 or better for a two-tailed test. S.D. = standard deviation.

Heterogeneity of Retail and Manufacturing Industries

Before testing the hypotheses, the validity of the present study's theoretical premises regarding the differences in the difficulties of monitoring across industries was investigated by calculating the heterogeneity of firm productivity[4] in manufacturing and retail industries. The reasoning was that greater heterogeneity makes predicting productivity more difficult and thus increases the cost of monitoring. Firm productivity was calculated by the log of total firm sales divided by the number of total employees. Heterogeneity was calculated by dividing the standard deviation by the mean for all firms in the industry. As shown in Table 2, the productivity of retail firms was significantly more heterogeneous (0.12) than for manufacturing firms (0.09). This analysis appears to confirm the present study's contentions that, in comparison to manufacturing industries, the link between managerial behavior and productivity in retail industries is more difficult to predict. As the prediction provides a baseline for assessing the productivity of managers, these results suggest that controlling agency problems in manufacturing industries should be easier than in retail industries.

Table 2. Heterogeneity of Firm Productivity by Industry

Firm Productivity	Manufacturing	Retail	Difference
Mean	11.36	10.63	0.73 **
Standard Deviation	1.02	1.30	−0.28 **
Heterogeneity	0.09	0.12	−0.03 **

**Significant at .01 level; *Significant at .05 level.

Instrumental Variables: Controlling for Endogeneity

We controlled for endogeneity of family ownership because the results could be affected by reverse causality or latent factors that were not included in the model. Following Hamilton and Nickerson (2003), we applied the two-stage regression approach by using instrumental variables. We identified instrumental variables that were strongly related to the focal variable, but unrelated to the dependent variable. The instrumental variables we used were *founder control*, and *succession intention*. Founder control was measured as a categorical variable in which "1" denotes situations where the founders' share of firm ownership was greater than that held by other family members. Succession intention was measured as a categorical variable in which "1" means the family had the intention to pass the firm to a later generation of the family.

These two instrumental variables were expected to be strongly related to family ownership, as founder and other family members are primary family stakeholders, and succession intention is an important factor distinguishing long-lasting family firms from others (Chua, Chrisman, and Sharma 2003). Conversely, the instruments were not expected to be strongly related to non-family management or industrial affiliation.

In Model 1 (first stage), the two instruments, moderator and controls were used to estimate family ownership (Table 3, Model 1). As expected, we found that the coefficient of founder's control was negatively related to family ownership ($B = -7.74$, $p < .001$), and succession intention was positively related to family ownership ($B = 8.90$, $p < .001$). In addition, these two estimators were found to be jointly significant (F-Statistic $= 38.29$, $p < .001$).
The *predicted* family ownership value obtained in Model 1 was used in the second stage regressions concerning the employment of non-family managers (Table 3, Model 2).
The *actual* values of family ownership were later used in robustness tests.

Table 3. Hierarchical Tobit Regression Analysis: Non-Family Management Among Firms with 20–100 Employees and At Least Two Managers

Dependent Variable	Family Ownership	Non-Family Management			
	Model 1	Model 2			
	OLS	TOBIT			
		Step 1	Step 2	Step 3	Step 4
Intercept	115.01 *** b c	−44.97 *	159.53 ***	170.64 ***	155.07 ***
Independent Variable(S)					
Family Ownership [a]			−1.68 ***	−1.85 ***	−0.67 ***
Moderator					
Retail Industry	4.68 **			6.56 **	52.93 *
Interactions					
Family Ownership × Retail Industry					−0.51 *
Control Variables					
Past Firm Productivity	2.04	1.20	2.53	3.23	3.73 †
Firm Age	0.07 *	0.09 †	0.09 *	0.13 **	0.12 *
Sales (Logged)	−3.86 **	−4.46 *	−3.54	−4.00 †	−0.40 †
# of Employee	−0.84	9.39 **	9.93 **	9.72 **	10.28 **
Instrumental Variable(S)					
Founder's Control	−7.74 ***				
Succession Intention	8.90 ***				
Regional Dummies	Yes	Yes	Yes	Yes	Yes
Periodic Dummies	Yes	Yes	Yes	Yes	Yes
Sample Size	965	965	965	965	965
R^2	0.19				
Log Likelihood		−4393.44	−4189.01	−4185.58	−4183.45

a Predicted from first stage regression.

b Unstandardized coefficients are reported.

c ***Significant at .001 level; **Significant at .01 level; *Significant at .05 level; †Significant at .10 level.

Analysis

Because family owned firms often askew non-family management, many observations were zero. Thus, Ordinary Least Square (OLS) regression may yield biased results in the second stage. To guard against this possibility, a Tobit regression was used for the primary analysis to generate more precise estimations. White's (**1980**) method for variance correction of the error terms was applied to adjust for the potential impacts of autocorrelation and heteroscedasticity.

The variance inflation factor (VIF) values were lower than 10 for all variables, ranging as high as 5.28 for annual sales. In considering VIF and correlation coefficients (Table 1), multicollinearity did not appear to be a problem.

Results

The results of the hypotheses tests are displayed in Table 3. The control variables, including past firm productivity, firm age, firm size, and the dummies for regions and years, were entered at step 1. As expected, firm age had a positive effect on non-family management. Annual sales and firm size was negatively and positively related to non-family management, respectively. Thus, firms that are older and larger tended to hire more non-family management. Older firms are, by definition, more likely to be managed by later generations of the family, who may place less emphasis on the SEW reasons to avoid hiring non-family managers. Larger firms may find it necessary to hire more non-family managers due to the sheer size of the firm. Nevertheless, firms may resist hiring non-family managers when cash flow increases, because greater revenues may increase non-family managers' temptation to behave opportunistically.

The independent variable, family ownership (predicted value based on Model 1, Table 3), was entered at step 2 to test H1, which stated that the extent of firm ownership held by a family is negatively associated with the extent of non-family management. Family ownership is negatively and significantly related to the extent non-family managers are used in the firms ($B = -1.68$; $p < .001$). Thus, H1 is supported. The family ownership variable remained negative and significant in the remaining steps of the analysis. The industry moderator was entered at step 3. The industry variable was positively related to non-family management.

Step 4 included the interaction term (family ownership × industry variable) to test H2, which stated that difficulties in monitoring moderate the link between family ownership of a firm and the extent of non-family management, such that the negative relationship becomes stronger in industries where the association between managerial behavior and firm performance is harder to measure. The results support H2. The coefficient of the interaction is significant and negative ($B = -0.51$; $p < .05$). This result indicates that the preferences of family owners to avoid hiring external managers are tempered by the opportunities and threats inherent in their industry: the proportion of non-family managers was lower in retail firms than in manufacturing firms. To verify the nature of the significant interactive effects, the effect of family ownership and industry on the extent of non-family managers was plotted using the coefficients of those variables from

Step 4 of the Tobit regressions. As shown in Figure 1, when family ownership was low, retail firms appeared to have higher proportions of non-family managers than manufacturing firms.

However, while increased family ownership led to fewer non-family managers in manufacturing firms, the slope was steeper for retail firms, indicating that the negative influence of family ownership was stronger in retail firms than in manufacturing firms. This result is consistent with H2.
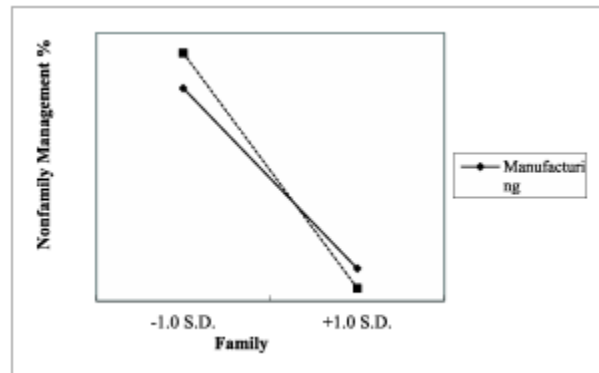

Figure 1. Non-Family Management by Family Ownership in Service and Non-Service Industries

Interquartile Regression of Firm Size

It is possible that family firms may be more inclined to employ non-family managers when firms become larger, because larger firms may place more weight on economic rather than noneconomic factors. Or, as size increases, the supply of potential family managers for management positions decreases. Both considerations impact the likelihood that non-family managers were employed. To further explore this issue, we conducted interquartile Tobit regression based on firm size, calculated as the number of total employees.5 As shown in Table 4, regression results were consistent for firms in the 25th, 50th, 75th, 90th, and 95th percentiles of firm size: the family ownership variable remained negative and significant, and its interactions with the retail industry variable were negative and significant.

Table 4. Interquartile Tobit Regression Analysis of Firm Size

Dependent Variable	Non-Family Management				
Percentile of Firm Size	25 percent	50 percent	75 percent	90 percent	95 percent
# of Employees	<=24 and >=20	<=32	<=46	<=67	<=80
Intercept	−125.05 [a]	−43.24	−40.04	−40.51	−30.86
Independent Variable					
Family Ownership	−0.22 [†][b]	−0.19 [†]	−0.20 [*]	−0.19 [*]	−0.19 [**]
Moderators					
Retail Industry	33.64 [†]	25.58 [*]	21.73 [†]	16.62 [†]	17.27 [†]
Interactions					
Family Ownership × Retail Industry	−0.39 [†]	−0.34 [*]	−0.29 [**]	−0.22 [*]	−0.22 [*]
Control Variables					
Past Firm Productivity	3.08	2.30	0.36	−0.07	0.10
Firm Age	−0.09	−0.04	−0.07	−0.12	−0.10
Sales (Logged)	0.46	2.92	2.21	3.11	2.75
# of Employees	38.85 [*]	25.76 [*]	16.97 [**]	15.37 [**]	13.01 [**]
Regional Dummies	Yes	Yes	Yes	Yes	Yes
Periodic Dummies	Yes	Yes	Yes	Yes	Yes
Sample Size	229	499	744	892	946
Log Likelihood	−958.083	−2125.94	−3226.84	−3901.52	−4142.33

a Unstandardized coefficients are reported.

b **Significant at .01 level; *Significant at .05 level; †Significant at .10 level.

However, the interquartile analysis revealed other size distinctions that are worth noting. First, the coefficient of family ownership was relatively stable across size categories, suggesting that factors inherent to family governance, such as SEW of the family, do not change much as family firms grow from small to medium-size. Second, the negative coefficient of the interaction of the family ownership and retail industry variables became weaker for family firms that are larger. This result implies that the agency cost stemming from the monitoring difficulty in retail sectors

becomes lower when family firms grow, possibly owing to the more efficient deployment of monitoring mechanisms and a higher likelihood that the firm has moved to a more formal structure with well-defined levels of management.

Robustness Tests

As mentioned above, various robustness tests were conducted to ensure that the results were not an artifact of the restrictions placed on the firms included in the sample.6 First, the analysis was run using a two-stage OLS regression rather than Tobit regression. The findings showed that, in all respects, the results were consistent with the Tobit analysis. The R^2 of 0.240 suggests a reasonable level of model fit. Second, the Tobit analysis was rerun, removing the restrictions on the number of managers from the second stage. The results were consistent with those reported above. Third, to deal with the fact that family firms with founders involved in ownership and management may behave and perform distinctively from other family firms (Gersick et al. 1997; Stewart and Hitt 2012; Miller et al. 2007), the ownership structure was considered. The family's ownership, the founder's ownership, and other family members' ownership were separated, and their interactions with the retail industry were examined.7 Consistent with the main analysis, the coefficients representing the ownership held by founders and other family members are both significant and negative, while their interactions with the retail industry variable are also both significant and negative.

Fourth, we controlled for the possibility that non-family managers may be unwilling to work for a family business. In other words, the reason for the lack of employment of non-family managers in family firms may be the consequence of non-family manager's *self-selection* rather than the *unwillingness* of family owners to hire non-family managers, because non-family managers may perceive that the family dynasty's existence means that a non-family manager would be at a disadvantage, particularly in cases where the family firm has not professionalized. However, certain visible indexes such as greater firm size and better performance may suggest that the family firm has indeed professionalized, and in such cases, non-family managers' may view prospective employment more favorably. To ensure our result is robust, we excluded the effect of non-family managers' self-selection from the primary effect using a two stage regression. In the first stage, family ownership was regressed against past firm productivity, firm size, and other controls. In the second stage, the independent variable (family ownership) was replaced by the *residual* of family ownership, estimated by the first stage regression. By doing such a two-stage regression, we separated the influence of family ownership from the effect of non-family manager's self-selection. Tobit regression results in the second stage were consistent with the primary analysis, meaning that self-selection did not appear to be a serious concern in the present study.

Fifth, we ran the regression without controlling for endogeneity. We tested our hypotheses using both OLS and TOBIT models. Regression results remained consistent with our primary findings. Finally, we replaced our continous variable of family ownership with a binary measure denoting whether family ownership is bigger than 50 percent.8 This approach acknowledged that, while the controlling family may have almost unlimited power as long as the family retains majority ownership, it may not have as much power at lower levels of control. Again, the TOBIT regression results were consistent with our primary findings.

Discussion

Drawing on agency theory, the concept of SEW, and the family business literature in general, the question of how different industries with different potentials for agency costs may influence the employment of non-family managers in family firms was explored. While a great number of internal factors have been explored in the family business literature (Sharma 2004), the present study contributes to a better understanding about how industry factors influence family firms' decisions and behaviors. Indeed, while previous studies largely treat environment (particularly industry) as a control, the present study provides further evidence that the impact of such variables may be greater than anticipated in the literature.

The present study's theory and empirical results suggest that, given all the other factors controlled, as family ownership increases, firms tend to become more reluctant to hire outside managers. Broadly speaking, this could be interpreted as evidence supporting Stewart and Hitt's (2012) arguments that family owners resist efforts to professionalize their firms because, in doing so, family owners may lose control of the dominant coalition. Our findings support the notion that family owners go to extreme lengths to preserve the family's SEW by preventing unnecessary agency problems. However, the present study's main contribution to the literature is the theoretical arguments and empirical confirmation that this tendency is moderated by industry, which affects the difficulty in monitoring managerial behavior. Results also suggest that family owners are much less willing to hire non-family managers when the relationship between managerial behavior and firm performance is less obvious. Conversely, results suggest that there are indeed certain situations where family owners are willing to accept a loss in SEW or an increase in agency cost in order to capture the economic benefits of employing non-family managers in the firm.

The primary family-firm literature implications of the present study's findings are that (1) the family's control of the dominant coalition and desire to preserve SEW has a significant impact on decisions such as those related to the employment of outside managers in family firms, and (2) SEW concerns do not blind family owners to the competitive necessities inherent in their industries. Thus, the present study's empirical results suggest that heterogeneous family firm behaviors, such as variations in hiring non-family managers, may be driven by both the noneconomic concerns of the family and economic opportunities and threats facing the firm. Recent studies largely focus on non-economic factors in explaining heterogeneity among family firms. The present study contributes to a better theoretical understanding of that heterogeneity by showing that neither economic nor noneconomic factors alone can fully explain family firm behavior.

This study points to the need to take a multitheoretical approach in the family-firm literature. SEW theory is not sufficient to explain managerial behavior in the employment context because SEW theory cannot fully explain the "exceptions" whereby family owners are more likely to employ non-family managers. We found that agency theory can help fill this gap. The present study's findings suggest that family owners are cognizant of how both the effort and ability of the management team might vary depending on the types of managers selected and how the relative importance of effort and ability come into play in different industry settings. Thus, although

family managers might provide greater effort—perhaps justifying in part a bias towards employing family managers—the average ability of non-family managers is likely to be higher (Carney 2005). When measurement of effort is complex (and information asymmetry exists), it appears that family owners tend to rely more on family members who they believe are more trustworthy and controllable; when measurement of effort is less demanding, family owners are more likely to hire non-family managers who may have more skills and knowledge than family managers. As such, this article highlights how information asymmetries can alter the costs and benefits associated with using family and non-family managers to manage the firm.

In addition, the present study contributes to agency theory by emphasizing characteristics of a task (that is, intangibility, standardization, and simultaneity) that can affect the cost of monitoring an agent's behaviors (Eisenhardt 1988, 1989). As such characteristics influence information asymmetries, they also suggest the extent to which stewardship behaviors are possible.

Finally, the results highlight the importance of fully considering the firm's environment. Owing to family owners' desire to protect its SEW, and the notion that industrial sector affects the agency costs involved with hiring non-family managers, industrial sector plays an important role in determining if non-family managers will be hired in family-owned firms. It is possible that other environmental characteristics may also affect the employment of non-family managers (and possibly other strategic decisions) if they perceive that such environmental characteristics require greater agency costs by employing non-family managers.

Alternative Explanation

We draw on SEW perspective and agency theory with a focus on principal-agent issues from the perspective of family members. Nevertheless, it should be noted that the hypothesized effects, especially the main effect (H1), might be explained by at least two alternative views when considering the perspective of non-family members—that non-family managers would rather work for non-family firms, and that increasing (decreasing) non-family ownership might cause less (greater) emphasis on employing non-family managers.

First, the present study consider family owners as the primary decision-makers regarding the employment of non-family managers since majority ownership in SME context allows them to have high level of unquestionable discretion (Chrisman et al., 2014). However, the present study also acknowledges that non-family managers may be more willing to work for non-family firms owing to lower career advancement and future income-earning opportunities in family firms (Chrisman et al., 2014). Additionally, non-family managers may perceive noneconomic goals of family owners as incompatible with their economic interests. For example, family firms often reserve executive positions for family members who may be available, willing, and able, thus making the promotion and advancement of non-family managers more difficult. Although we attempted to control for the possibility, non-family managers may be reluctant to work for family firms with higher levels of family ownership, as non-family managers may perceive unfair treatment of non-family members (Barnett and Kellermanns 2006). Our paper supports the current thinking in the family firm literature (e.g., Fang et al. 2015) that the willingness of non-family agents to work for a family firm is important to consider.

However, non-family managers who do want to work for family firms may be less qualified than managers who choose to work for non-family firms. Because the quality of non-family managers may be poor, relatively speaking, there may be a "lemons" problem (e.g., Akerlof 1970) that even stewardship tendencies on the part of non-family managers cannot prevent, due to asymmetric and incomplete information (Chrisman et al., 2014). The asymmetric and incomplete information is exacerbated by bounded rationality. Bounded rationality, in turn, limits not only the non-family manager's ability to contribute and succeed through difficulties in goal alignment and achievement, but also the family business owners' ability to evaluate (Chrisman et al., 2014). Because family owners may assume that the most qualified non-family managers would decline employment at the family firm, they may be less inclined to actively seek recruitment of non-family managers.

Second, PP conflict occurs when majority shareholders with concentrated ownership (e.g., family owners) expropriates minority shareholders' (e.g., non-family owners) wealth and entrenches the management. It has been argued and found that due to close monitoring, family-owned and -managed firms tend to have lower PP agency conflicts. However, there remains the potential for PP agency conflicts. For the focal question in this paper, the decrease of family ownership (accordingly, the increase of non-family ownership) enhances non-family shareholders' power. As a result, non-family shareholders, with the intention of protecting their financial interest from major family shareholders, may be more apt to hire non-family managers. Indeed, compared to family managers, non-family managers are more likely to favor income distribution, and less likely help the family expropriate non-family owners' interests. This argument would suggest that a decrease (increase) in family ownership should be associated with an increase (decrease) in non-family management due to non-family owners' concern for PP issue, which is consistent with H1 in this study.

However, we expect PP conflict is less likely to occur in SMEs (except for family firms with dispersed family ownership; e.g., Chrisman et al. 2012b) for at least two reasons. First, smaller firms allow close monitoring and control such that expropriation behaviors of family owners are more likely to be observed, hence prevented, by non-family owners. Therefore, non-family shareholders are not apt to hire non-family managers for monitoring purposes. Second, PP problems such as tunneling—the transfer of assets and profit out of firms as excessive executive compensation or insider trading and dilutive share issues—are less likely to happen in smaller firms. Tunneling is more likely to take place when the firm reaches a certain size threshold and starts to build business connections with other related and often family-controlled firms. SMEs are therefore an appropriate sample for this study because they are consistent with our focus on principal-agent problems.

Managerial Implications

For family business practitioners, these findings indicate that more attention should be given to the external context in evaluating agency problems of professional managers. If indeed agency costs are higher in certain industries such as retailing where monitoring non-family managers is harder, family owners have two choices: (1) use non-family managers sparingly or not at all, or (2) be prepared to make greater investments in monitoring and incentives programs. Although

this study's findings suggest that, given other factors, family owners seem to prefer the first option, that does not mean foregoing the use of non-family managers is always the most desirable alternative. *Ceteris paribus*, family owners must take their economic and noneconomic goals for the firm and the extent to which their current management configuration is achieving those goals in account when weighing the options between more or less non-family involvement in the management team. Manufacturers face similar choices but the trade-offs appear less stark. However, as the larger pool of managers available in the general labor market suggests that the acumen of the management team can be enhanced by hiring from outside the family (e.g., Carney 2005), decisions on how to manage these trade-offs should never be taken lightly.

Limitations and Future Research Directions

The present study has several limitations. Correcting these limitations provides opportunities for other useful work.

First, a database that primarily consisted of small and medium-size enterprises and that classified retail and manufacturing firms according to sector was used. Thus, the present study's findings may not generalize to large family firms or to firms in specific industries with more disparate characteristics. In particular, the distinctions made between retail and manufacturing firms may not always apply. In addition, the present study's categorization does not fully consider the heterogeneity of industrial sectors, as manufacturing and retailing industries contain a variety of distinctive businesses that cannot be captured by a simple category. Owing to limitations of the database, this study is unable to make finer grained distinctions. Future research is necessary to gain a more complete understanding of this phenomenon.

Second, there are undoubtedly other variables that influence decisions to employ non-family managers in family firms that have not been fully considered in the present study. For example, certain family attributes, such as family size, family structure, generational stage, succession intentions, and kinship networks may play a critical role. In addition, different industry sectors were compared specifically because they appear to provide environments with markedly different potential for agency problems between owners and managers. However, comparing other environmental contexts that might also influence the agency costs of hiring non-family managers would also be interesting. For example, the possibility of agency problems is likely to vary in different institutional settings. Likewise, there may be a variety of internal and external factors that influence the importance of SEW; intentions for trans-generational control and aspiration levels are two internal factors, whereas community embeddedness and firm visibility are two external factors that come to mind. Future qualitative research would be useful, in that it would be able to examine these factors as well as confirm the managerial behavior we believe our results suggest.

Third, the present study's data were collected from clients of the SBDC program. Although this sample is large and prior work suggests that these firms are reasonably representative of the general population of small firms in the United States (Chrisman et al. 2012a, 2012b), there is still a need for further research to ensure that these findings are not an artifact of the sample. In particular, conclusions based on a sample of small and medium-size firms in the United States may underestimate the distinctions of certain family attributes among different cultures, which

may be critical to the decisions of employing non-family managers. For instance, in most of Asia and South America, family systems are composed of both nuclear family and extended kinship ties. Furthermore, legal protections for property rights may be lower. As such, families in those regions may be larger, and the imperative of family management to forestall opportunistic behavior more important, regardless of industry (Ilias 2006).

Finally, this study assumes that family managers are less skilled than comparable non-family managers. However, some family firms, particularly ones that are more established, may already self-professionalize by requiring kin to obtain skills that meet or exceed those available from the pool of non-family managers. Future research should investigate this possibility.

Conclusion

Driven by agency theory and the extant family business literature on SEW, this study explored whether industry type may interact with family governance to influence the extent that non-family managers are employed in family firms. Findings suggest that an increase in family ownership reduces the likelihood of hiring non-family managers, and that the relationship is exacerbated when family firms compete in industries where monitoring non-family managers is more difficult, such as in retail industries.

Footnotes

1. Family firms are defined by a family's ownership and control of a firm, and a vision for how the firm will benefit the family, potentially across generations (e.g., Bennedsen, Perez-Gonzalez, and Wolfenzon 2010; Chua, Chrisman, and Sharma 1999).

2. A professionally managed firm is one that is more bureaucratic than a nonprofessionally managed firm and has governance mechanisms, such as the market for corporate control, that reduce the threat of managerial opportunism (see Gedajlovic and Carney 2010).

3. Incentives compensation is also possible, but the noneconomic goals of family owners often render them unreliable and in some cases counterproductive as motivational devices (Chua, Chrisman, and Bergiel 2009). In any event, for incentives to work, some amount of monitoring is still required.

4. We used labor productivity to proxy firm productivity because we are interested in managers' performance, which is likely to be influenced by employees' work productivity.

5. Endogeneity is not controlled in this analysis because the founder's control may impact a firm's potential to grow, and firm size may influence the family's desire to pass the firm to later generations

6. The results of these analyses are available from the first author on request.

7. To control for the collinearity between founder's and other family members' ownership, both terms and their interactions with retail industry were adjusted by industrial average in each year. Also we are unable to control for endogeneity in this analysis.

8. We did not use a two-stage endogeneity-control technique here as a binary independent variable lacks variance and should not be represented by instrumental variables.